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METHOD AND PROCEDURE IN ESTIMATING PRODUCTION,  
DISPOSITION AND INCOME FROM  
POULTRY AND EGGS //

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# C O N T E N T S

	Pages
Introduction . . . . .	1

## PART I.

### Studies of production, commercial movement, farm consumption and sale of poultry products.

Sources of data on production and consumption of poultry and eggs. . . . .	3
Census reports on poultry and eggs, 1880-1925 . . . . .	5
Production of poultry, analysis of commercial movement, receipts, and other data. . . . .	19
Production of eggs: analysis of commercial movement, receipts, and other data. . . . .	30
Consumption of poultry and eggs on farms . . . . .	41
Prices of eggs. Basis of average farm price per doz. . . . .	57
Prices of chickens. Basis of farm price of chickens. . . . .	57

## PART II.

### Estimates of poultry and eggs, 1920-1929

Chickens on farms, January 1, 1920-29, number and value . . . . .	61
Chickens raised, consumed on farms and sold, 1924-29, number and value. . . . .	67
Hens and pullets in farm flocks of crop reporters, 1925-1929. . . . .	75
Chicks and young chickens of current year's hatch on farms, 1927-1930. . . . .	84
Hatchings: method and place. . . . .	86
Mortality of chickens. . . . .	88
Types of chickens in farm flocks. . . . .	90
Eggs: estimated farm production and value, 1924-1929. . . . .	92
Eggs, production and disposal of eggs on farms, number and value, 1924-1929. . . . .	97
Eggs laid per farm flock by months, 1925-29 . . . . .	105
Eggs laid per 100 hens and pullets of laying age, by months, 1925-1929. . . . .	116



## Introduction.

Method and procedure in arriving at the gross value, gross income, and cash income of farmers from chickens and eggs previously published (1/) as a part of the Bureau's estimates of income by States for each year beginning with 1924, are described in this report.

Gross income of farmers from poultry and eggs is exceeded only by that from milk and milk products, hogs, cotton, and since 1924 has exceeded a billion dollars annually. Yet because of the wide diffusion of production, the value of products per farm is only \$200.

Statistics of this huge business enterprise of farmers are fragmentary, except for the census reports and the annual estimates of the Division of Crops and Livestock Estimates, which are based on the census and on reports of correspondents.

The problem attacked in this study is that of showing for each year the value of chickens and eggs produced in each of the States, and the disposition of this value as between sales and farm consumption. The major problem becomes that of determining production, as price series are relatively well established. Given the quantities produced values are obtained by application of suitable prices.

Early in the examination of the data it seemed probable that the production and sales reported by the census were insufficient to cover the requirements for consumption. Further, the method of census enumeration (asking for the sum of a multitude of detailed observations over a period of one year) makes understatement almost a certainty, depending somewhat on conditions at the time the question is asked.

The several sets of indications of production have been examined separately and the results fitted together with due regard to the relative values of the sources of information as evidence. Many of the figures necessarily represent the best present judgment of the estimator rather than finally determined facts. Some increase over census figures is necessary. The increases adopted in the computations have been conservative, or at any rate less than some of the indications and opinions of some trade factors would warrant.

Work now in progress may make advisable modification of the rates used in the computations. To that extent, supplemented by the constructive criticism of workers in the field, the figures herein given are preliminary. Minor changes in the figures may result from discovery of clerical errors in the almost numberless computations.

Poultry and eggs are produced on about 5,500,000 farms in the United States. They are also raised extensively in villages and towns, but the proportion so produced is believed to be relatively quite small compared with the farm production. Owing to the wide diffusion of the industry into so many small units, to the fact that it is a minor project on most farms and to the lack of organization among producers, no compelling demand has arisen, and no provision of funds has been made by the Federal Government, for the collection and publication of adequate statistical data for this industry.

1/ See Crops and Markets, September 1929 p. 373 and October 1929 page 411.  
See also in Part I, Sec. 2 of this series.

Recognizing the importance of the industry and the need for statistics of its past development, present status and future prospects, the Department of Agriculture began in 1922 the preparation and publication of annual estimates of numbers of poultry on hand January 1, and production of poultry and eggs during the previous year. These January 1 estimates of numbers on farms started with the Census figures for 1920 and were brought forward to 1925 on the basis of annual changes in numbers shown on farms of crop reporters. Changes in annual production of poultry and eggs were estimated on the basis of an assumption of increase or decrease proportional to the increase in numbers of poultry on hand at the end of the year. Data were limited to the United States and to the six principal geographic divisions of states, no attempt being made at state estimates. The basis of these estimates was considered inadequate and although the estimates of numbers at least were later shown to be reasonably accurate, the attempt was discontinued. In 1925 a beginning was made toward providing an adequate basis of information by the insertion of a regular item on the monthly schedule to crop reporters, asking for the number of hens and pullets of laying age in their flocks and the number of eggs laid on the first day of the month. This monthly inquiry has been supplemented by an annual January 1 inquiry on numbers of all chickens on hand, and by other periodic inquiries on various phases of the industry. The lack of provision of personnel for study of these data and other available statistics on poultry production has delayed the publication of any adequate summary of the results, attention having been given to the subject only when time could be spared from established projects.

The preparation of the present estimates has been the work mainly of Dr. S. A. Jones. Mr. J. B. Shepard, has contributed considerable work and many valuable suggestions. Generous help has been given by other workers in the Division of Crop and Livestock Estimates and in state offices and by the poultry specialists in other branches of the Department. The detailed tabulations and computations are the work of Miss Sallie Clower and the final preparation of this manuscript the work of Mrs. Mary Perry, and Mr. C. B. Sydow.

The estimates that follow are accompanied by brief explanatory notes indicating their source, character, and limitations.

SOURCES OF DATA ON PRODUCTION AND CONSUMPTION  
OF POULTRY AND EGGS.

In connection with the preparation of annual estimates on poultry and poultry products and of estimates on farm income from these, the principal statistics found available were the Federal Census Reports of numbers and production, the reports of the U. S. Bureau of Agricultural Economics on receipts of poultry and poultry products in leading markets, the Interstate Commerce Commission's report on car lot movement of these on original consignment; various surveys on consumption; the enumeration by assessors in a few states of numbers of poultry on farms, and the annual and monthly returns on poultry and eggs furnished by crop reporters of this Department since 1925.

The Federal Census reports for successive periods stand in a class by themselves for comprehensiveness and are accepted as the main dependence. While reasonably complete for numbers of farm poultry on hand at the time of taking the Census, it seems evident that they are low in the reported number of eggs laid and sold, and of chickens raised and sold during the previous year. These production and sales figures are not enumerations of facts within the immediate knowledge of the farmer, but merely a record of his judgment or best guess, or that of his wife, or of the enumerator. Omissions and understatements under these conditions are to be expected.

The data available to determine the extent of Census omissions in these items are far from satisfactory, since these are more or less fragmentary, and besides other imperfections, lack the comprehensiveness of the Census returns. These check data are so imperfect that one would hesitate to depart from the Census figure at all except for the very obvious incompleteness of the latter. While any adjusted figure based on such checks will be subject to a considerable margin of error this error should be much less than that due to the evident gross omissions in the Census figures for production and sale of poultry and eggs.

Separate discussions follow of the results of studies of -

- (a) Census indications of numbers of poultry and of production of poultry and eggs from the date of the first Census on poultry in 1880;
- (b) Indications of production and consumption of poultry;
- (c) Indications, from various sources of production and consumption of eggs;
- (d) Farm consumption of poultry and eggs, as reported by Crop Correspondents;
- (e) Basis of accepted prices and values.

It is realized that these studies are incomplete, since it has not been possible to canvass the entire field of available statistics. It is hoped that a perusal of the studies by those in touch with the industry and its literature in different sections of the country will bring to light a considerable volume of additional evidence that will assist in arriving at final figures more satisfactory than those that have been tentatively fixed on the basis of the present available evidence.



Following these several discussions are tabular statements giving estimated numbers and values of chickens, production and value of chickens and eggs, farm consumption and sale of poultry products, etc.

The Census of 1920 is the basis for numbers of chickens in that year. Annual reports by crop correspondents of numbers in their own flocks on January 1 supplied the available evidence of change from 1920 to 1924.

The adjusted Census figures for 1924-25 afforded evidence of the substantial accuracy of the estimates from 1920 to 1925 and provided a fresh starting point for estimates covering subsequent years. Changes subsequent to 1924 are based mainly upon the monthly reports of the crop correspondents of the Department of Agriculture covering in excess of 20,000 farm flocks each month, and the annual reports covering about 50,000 flocks. These figures have been checked by such evidence of change in numbers as could be deduced from available records of marketings, special surveys, enumerations, etc. When the 1929-1930 Census figures become available, necessary revisions will be made to the 1925-1930 estimates.

## CENSUS ENUMERATIONS OF POULTRY AND EGGS

The Census first included an inquiry concerning poultry in 1880. The inquiries related to numbers of birds on hand at the date of the Census, and number of eggs produced in the preceding year. In 1890 and 1900 the inquiry asked separately for numbers of chickens, turkeys, ducks, and geese, and production of eggs. In 1910, guineas and pigeons were added to the inquiry, as also the number of chickens raised. In 1920 practically the same ground was covered. In 1924 the inquiry was limited to number of chickens on hand and number of chickens raised and eggs produced.

Rotoprint Figure No. 1 shows for the successive Census periods the reported Census figures on poultry and eggs. Figure No. 2 shows the forms of inquiry used at each Census. Figure No. 3 shows the Census figures as published, without modification.

The figures as reported for the different Census periods need to be considered and appraised in the light of the forms of inquiry used at each Census. In order to make the figures comparable it is necessary to allow for these differences in dates and in language. The reports for each Census will be taken up and discussed in chronological order:

### POULTRY

The Census of 1880 reported "poultry on hand June 1, 1880, exclusive of spring hatchings", -- "Barnyard", 102,272,000; "Other", 23,235,000; All, 125,507,000

From the results, it seems likely that the question as asked may have sounded as odd then as now. The number reported as "barnyard" poultry is presumably meant for chickens. This figure is only about 80 per cent of the total, whereas, the evidence of later Censuses shows chickens making up from 87 to 97 per cent of all. It is probable that a considerable number of chickens were reported under "other", or else that this figure includes some young birds.

If we examine the returns for the Census of 1900 we find that the proportion of other poultry than chickens reported as of June 1, 1900, which included fowls over three months old, was less than 7 per cent of all poultry. Assuming that the average date of enumeration was some time after June 1, probably nearer July 1, this enumeration probably included 10 per cent more or less of young birds over three months old hatched during February and March. The proportion of young turkeys, ducks, and geese compared with young chickens included in the enumeration would almost certainly be considerably greater than the proportion of mature birds of those kinds to mature chickens, because only enough of these other birds are carried over to supply the winter market and to produce eggs for hatching, while large numbers of chickens are kept over for production of market eggs. The proportion of 7 per cent would, therefore, probably be excessive as a measure of the mature "other" poultry in 1880.

The Census of 1890, taken also as of June 1, called for "poultry by classes" and did not exclude young, though it did not specifically call for young. The proportion of "other" (ducks, turkeys, and geese) was reported at about 9%. Because of inclusion in 1890 of an indefinite but large proportion of young stock, this is much too high a proportion to be applied to 1880, when spring hatchings were excluded.

The proportion of "other" poultry in the later Censuses is about 3%. It seems evident that the proportion of mature "other" poultry in the Census of 1880 could hardly have reached 7%, and that the high figures of 20 per cent reported for "other" was due to the peculiar wording of the schedule. Accepting 7 per cent for "other" would leave approximately 117 million mature chickens on hand as of June 1 of 1880.

Based upon present seasonal trends in numbers as shown in the monthly returns of farm flocks, the number of mature chickens on June 1 compared with numbers on January 1 is about 78%. Assuming that less drastic culling was practiced in earlier years than now we may accept for June, 1880, 83% as the number at time of enumeration compared with number on January 1. 117,000,000 divided by .83 gives 141,000,000 as the indicated number of chickens on January 1, 1880.

In 1890 the Census reported poultry on hand June 1, (without restrictions as to age) at -

Chickens . . . . .	258,871,000
Turkeys . . . . .	10,754,000
Ducks . . . . .	7,544,000
Geese . . . . .	<u>8,440,000</u>
Total . . . . .	285,609,000

According to the present monthly returns for farm flocks the number of young birds in June and July is about a third greater than the number of mature birds. Since it can not be known what proportion of young birds was included in the enumeration, the Census figures have little or no comparative value. Owing to this complication it is necessary to interpolate a figure for 1890 from the established numbers in 1880 and 1900. The average accepted number of chickens on January 1 of these two dates is approximately 200 million.

Some indication on numbers of poultry may be derived from reported numbers of eggs produced. Eggs reported produced in the first three Census years were, 457,000,000 dozen in 1879; 820,000,000 in 1889; and 1,294,000,000 in 1899. This shows an increase of 837 million dozen within the two decades, of which 363 million, or 43.4% occurred in the first decade. If the increase in numbers of chickens was in the same proportion, the indicated increase to 1890 out of the total increase of about 119 million in the twenty years, would have been, 43.4% of 119 million = 51 million, which added to the 141 million on January 1, 1880, would give 192 million as the number of chickens for January, 1890. In view of the evident increase in rate of laying, this indication would tend to be low. Also, in 1890, "number" of eggs was asked, and the tendency of some to report in dozens would have affected the total downward. In the absence of further evidence, the tentative figure is accepted of 195 million chickens on January 1, 1890.



Figure I.- Poultry in the United States.  
As shown by reports of Census 1880 to 1925.

Item	June 1, 1880.	June 1, 1890.	June 1, 1900.	Apr 15, 1910.	Jan. 1, 1920.	Jan. 1, 1925.
	Number Thousands	Number Thousands	Number and value Thousands	Number and value Thousands	Number and value Thousands	Number and value Thousands
Poultry on hand, number.			250 624	295 880	372 825	
All poultry on hand, total value.			\$85 759	154 663	373 394	
Poultry raised previous year, total value			\$186 130			
Fowls all kinds raised, previous year, number				438 468		
Fowls all kinds raised, previous year, value				\$202 506		
Fowls all kinds sold previous year, number				153 600		
Fowls all kinds sold previous year, value				\$75 274		
Chickens on hand, number.	102 272	258 571		280 341	359 537	409 291
Chickens on hand, total value				\$140 193	\$349 509	\$379 011
Chickens inc. guineas over 3 mo. on hand			233 566			
All other fowls on hand.	23 235	26 738		↓		
Chickens raised previous year				460 611	473 201	545 848
Chickens raised, total value				\$184 903	\$386 240	\$419 381
Chickens sold previous year, number					140 811	
Chickens sold previous year, value					\$119 723	
Turkeys on hand, number.		107 54		3609	3627	
Turkeys on hand, value.				\$6606	\$12905	
Turkeys 3 mo. old and over, on hand.			6595			
Ducks on hand, number.		7944		2907	2818	
Ducks on hand, value				\$1567	\$3374	
Ducks 3 mo. old and over, on hand			4786			
Geese on hand, number		8440		4432	2939	
Geese on hand, value				\$3195	\$5429	
Geese 3 mo. old and over, on hand			5677			
Guineas on hand, number				1765	2410	
Guineas on hand, value.				\$613	\$1582	
Pigeons on hand, number				2731	1494	
Pigeons on hand, value				\$762	\$538	
Ostriches on hand, number			0.7	5.2	0.2	
Ostriches on hand, value				\$1696	\$58	
All eggs produced previous year	456 911 <sup>12</sup>	819 723 <sup>12</sup>	1293 662	1591 311 <sup>12</sup>		
All eggs produced, total value			\$144 21	306 689 <sup>12</sup>		
All eggs sold previous year				926 466 <sup>12</sup>		
All eggs sold previous year, value				\$180 768		
Chicken eggs produced previous year				1574 979 <sup>12</sup>	1654 045 <sup>12</sup>	1913 245
Chicken eggs produced, total value				\$303 296	\$661 083	\$571 938
Chicken eggs sold previous year,					1010 313 <sup>12</sup>	
Chicken eggs sold previous year, value					\$404 563	

↓ Estimate quoted in 1919 Census report.

↑ Dozens, including estimates of production for farms reporting chickens but not eggs. Eggs "sold" are as reported.

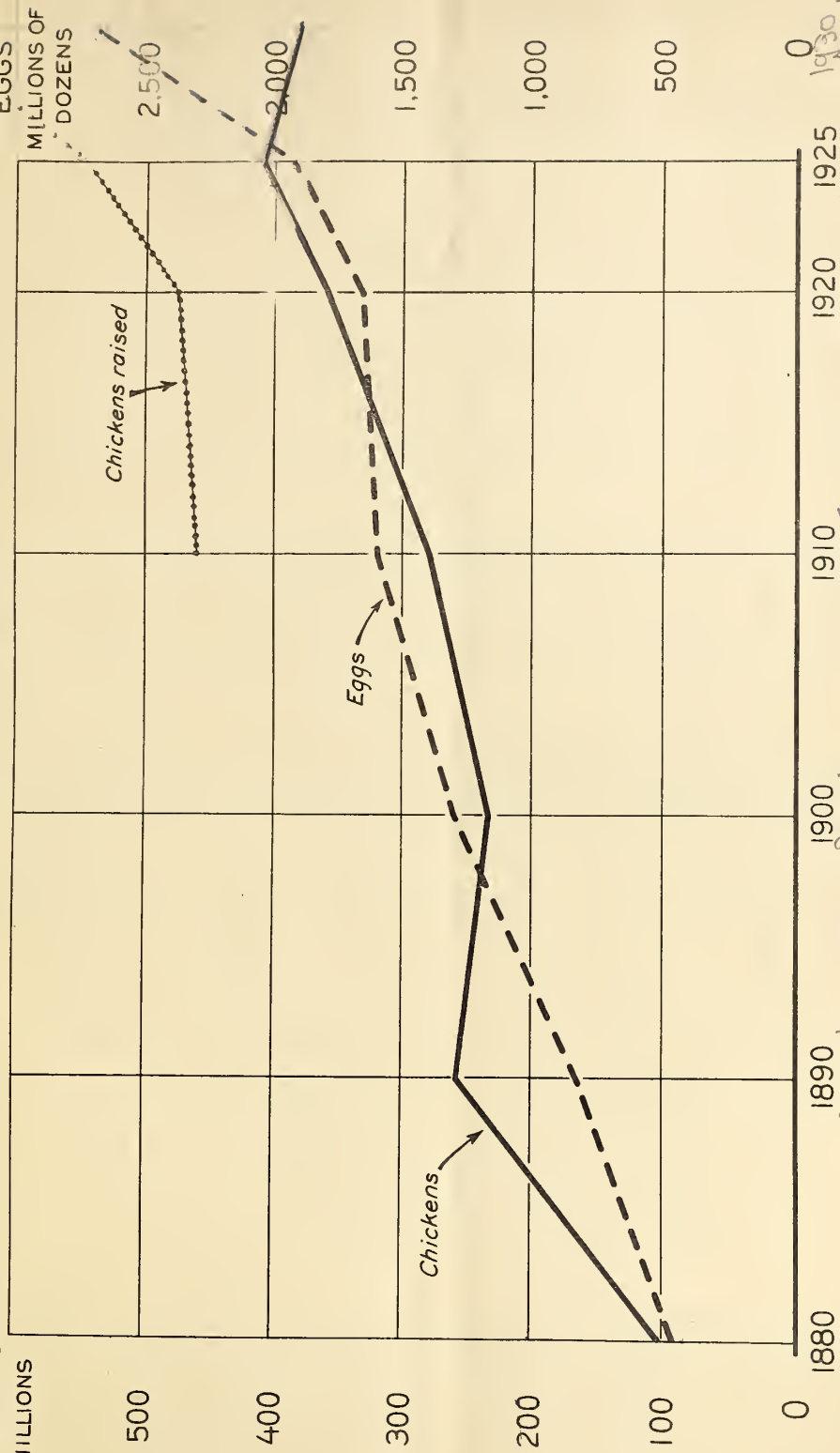
Figure 2. Forms of Census Inquiries on Poultry 1880 to 1925.

1880						1890						1900					
Poultry on hand June 1, 1880 exclusive of spring hatching				Eggs produced in 1879		Poultry On hand June 1, 1890				Value of all poultry sold in 1889. Dollars		Poultry and Eggs: Number of fowls over 3 months old on the farm June 1, 1900 (Report guinea fowls with chickens)					
Barnyard		Other				Chickens	Turkeys	Ducks	Geese			Chickens	Turkeys	Geese	Ducks		
No.		No.				No.	No.	No.	No.								
						Eggs produced in 1889	Eggs sold in 1889	Value of eggs sold in 1889				Value of the poultry of all kinds and of all ages on hand June 1, 1900. \$ Value of the poultry of all kinds and all ages raised in 1899, whether sold, consumed, or on hand June 1, 1900. \$ Dozens of eggs produced in 1899 — Total value of all eggs produced in 1899 \$					
						No.	No.	Dollars.									
1910						1920						1925					
Fowls over three months old on farms April 15, 1910.						Poultry Jan. 1, 1920.				Number		Value		Poultry on this farm Jan. 1, 1925.			
Kind	No.	Value	Kind	No.	Value	Chickens _____						Chickens Number _____					
						Turkeys _____						Turkeys Number _____					
Chickens			Geese/ Guinea Fowls			Ducks _____						Poultry products in 1924; Chicken eggs produced in 1924—Doz. Include all chicken eggs produced whether sold, used, incubated or otherwise disposed of.  Chickens raised in 1924—Number Include all chickens raised, whether sold, consumed or on hand, except baby chicks hatched and sold. Include baby chicks purchased and raised.					
Turkeys						Geese _____											
Ducks						Guinea Fowls _____											
Fowls and eggs produced in 1909; Fowls of all kinds raised in 1909, whether sold, consumed, or on farm — Number — Value  Fowls sold in 1909 — Number — Amt rec'd Eggs produced in 1909 — Dozens — Value Eggs sold in 1909 — Dozens — Amt rec'd						Pigeons _____											
						Eggs and chickens				Quantity		Total value					
						Eggs produced in 1919 (incl. only chicken eggs produced, whether sold used, incubated or otherwise disposed of)				Doz.		X X X					
						Eggs sold in 1919 produced on the farm				Doz.		\$ —					
						Chickens raised in 1919 (include all chickens raised whether sold, consumed or on hand)				No.		X X X					
						Chickens sold in 1919 (including those raised on this farm, sold alive or dressed).				No.		\$ —					



CHICKENS  
MILLIONS

AS REPORTED BY U.S. CENSUS



\* EGG PRODUCTION IS FOR YEAR PRECEDING THE CENSUS

U.S. DEPARTMENT OF AGRICULTURE

FIGURE 3

BUREAU OF AGRICULTURAL ECONOMICS

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May. 1938



The Census of 1900 asked for number of fowls over 3 months old on the farm June 1, 1900, by kinds, and reported:

Chickens, (including Guinea-fowls)	233,566,000
Turkeys . . . . .	6,595,000
Ducks . . . . .	4,786,000
Geese . . . . .	<u>5,677,000</u>
Total . . . . .	250,624,000

Later Census reports show Guineas to be 0.6 to 0.7 per cent of the chickens. This would leave chickens about 232,000,000 including some chicks over three months old. The number of young chicks reported on hand on April 1, 1927 and 1928 was about 40 per farm flock. The proportion of early hatched birds is probably higher now than then. About 30 of the 40 young birds would probably survive to July 1 and then be 3 months of age or over. This number would be equal to 40% of the present average reported number of 75 old birds on hand at that date.

The number of young birds that would be three months old by June 1, i.e., hatched before March 1, would be much fewer, possibly not to exceed 5%. As the actual enumeration would be nearer July 1 than June 1, the proportion of young birds 3 months old included in the enumeration can reasonably be conservatively estimated at 10% of the old birds. Then,  $232,000,000 \div 110 = 211,000,000$  as the indicated number of mature birds in June.

Assuming that culling would have been somewhat more efficient than in 1880 and accepting 81% as the proportion remaining in June of birds on hand January 1, we obtain  $211,000,000 \div 81 = 260,000,000$  as the indicated number of mature birds on hand January 1, 1900.

The Census in 1910 was taken as of April 15. It asked for fowls over three months old (on April 15) by kinds.

The report shows -

Chickens . . . . .	280,341,000
Turkeys . . . . .	3,689,000
Ducks . . . . .	2,907,000
Geese . . . . .	4,432,000
Guineas . . . . .	1,765,000
Pigeons . . . . .	<u>2,731,000</u>
Total . . . . .	295,865,000

Very few birds of the current years hatch over three months of age would be found in April. The monthly returns indicate that at present the number of mature chickens on about May 1 is approximately 84% of the number on January 1, or (say) 86% on April 15. Allowing somewhat lighter culling in 1910 than now, we may accept (say) 87% as the proper proportion.  $280,341,000 \div 87\%$  indicates 322,000,000 chickens on hand January 1, 1910.

The Census of 1920 was taken as of January 1 and reported -

Chickens . . . . .	359,537,000
Turkeys . . . . .	3,627,000
Ducks . . . . .	2,818,000
Geese . . . . .	2,939,000
Guineas . . . . .	2,410,000
Pigeons . . . . .	1,494,000
Total . . . . .	372,825,000

The proportion of these under three months of age would be negligible.

The 1925 Census, also of January 1, reported only --

Chickens . . . . .	409,291,000
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The actual date of enumeration of all of the various censuses would probably be sometime later than the stated date, and as the intervening period would be during the time of seasonal decrease in numbers of mature birds the actual numbers would probably have been 2% or 3% larger on the date to which the census presumably relates than on the date when reported.

While the Census specified numbers at the stated date the numbers reported would more likely approximate those on hand at the date of actual enumeration. It is probable, therefore, that the derived figures already stated, and summarized below, are somewhat low from this cause.

The figures of probable numbers of chickens on January 1 as thus developed for the different Censuses are remarkably uniform for the successive decades except 1920 and we know that numbers declined materially during the war period ending in 1920.

The number of chickens on January 1, as indicated by the adjusted Census numbers, and the number per capita are as follows:

Table 1. Chickens on hand January 1, and numbers per person, indicated by adjusted Census figures, 1880-1925.

Year	Number of chickens	Total U. S. Population	Number of chickens Per Capita
	(Millions)	(Millions)	
1880	141	50	2.82
1890	195	63	3.10
1900	260	75	3.42
1910	322	92	3.50
1920	360	106	3.40
1925	409	115	3.56

*Numbers of chickens indicated*

102  
259  
134  
280  
360  
409  
379

The stability of the per capita figure since 1900 is not really surprising. The supply reacts quickly to demand since the span from egg to laying hen is less than a year. Some greater incompleteness in the 1880 and 1890 figures than subsequently is possible, and is suggested by the low per capita shown. It is probable, however, that the relative proportion of town and village poultry was a greater factor in those earlier years, when a much greater proportion of the non-



farmington population lived in towns of moderate size, where the keeping of poultry was possible and commonly practiced. Such flocks are relatively much fewer now. These would have been more likely to escape the Census enumerators than the relatively few large commercial flocks now kept in towns.

Mr. Paul Mandeville, Secretary of the U. S. Egg Society, has pointed out that the years 1880-1900 represented the period of greatest development in cold storage, which would help to explain the comparatively great expansion in the poultry industry and particularly in egg production during that time.

A straight line drawn on Figure 4 between the indicated numbers shown for 1880 and 1925 passes practically through the points of indicated numbers in all years except 1920. This uniform increase is in harmony with and doubtless related to the rather uniform increase in population which was for the successive ten-year periods 13, 13, 16, and 14 millions, and for the last (5-year) period 9 million (Census estimate).

### Eggs

The reported numbers of eggs produced in Census years are seriously affected by changes in dates of enumeration, besides being subject to a strong downward bias from understatements due to faulty memory.

The inquiries for successive Censuses have been practically identical in language except that they are limited to "chicken" eggs in 1920 and 1925. The form and result of the inquiry in the different years are as follows:

Table II. Eggs produced in United States, Census reports, 1880-1925.

Year	Question as asked in Census Schedule	Number published (in millions of dozens)
1880	Eggs produced in 1879 Dozen	457
1890	Eggs produced in 1889 Number	820
1900	Dozens of eggs produced in 1899	1,294
1910	Eggs produced in 1909 No. of Doz.	1,591
1920	Eggs produced in 1919 Dozen (including only chicken eggs produced, whether sold, used, incubated, or otherwise disposed of.)	1,654
1925	Chicken eggs produced in 1924 Doz. (including all chicken eggs produced, whether sold, used, incubated, or otherwise disposed of)	1,913

The use in 1890 of the unit of one egg instead of one dozen probably brought some replies in terms of dozens, which unless carefully edited would have given figures relatively smaller in that year than in the other censuses.

The relation of Census numbers of chickens to number of eggs for the first three Censuses is as follows; expressed in millions:

	<u>Chickens</u>	<u>Doz. Eggs</u>	<u>No. Doz. Per Chicken</u>
1879	141	457	3.24
1889	195	820	4.21
1899	260	1,294	4.98

A change so great as this in average layings seems unlikely, but we lack any conclusive check to disprove it.

The Census Bureau in 1920 estimated the production of eggs other than chicken eggs at approximately 1% of the total number of poultry eggs produced.

The enumerated figures represent the judgment of the householders or enumerator based mainly on memory which would be much influenced by conditions existing at the time of enumeration.

The enumerations of 1880, 1890, and 1900 were as of June 1, at the close of the period of heaviest layings, which extends from March through April and May into June. We may expect the returns at this date to show maximum figures for such an inquiry.

As stated previously, the Census of eggs in 1880 might have been less complete from the poultry inquiries being new and badly expressed and in 1890 from eggs being asked in numbers rather than dozens. In 1900 the influence of the period of heavy laying preceding might have partly offset the tendency to understate due to faulty memory and inherent conservatism when called upon to estimate numbers that run into hundreds and possibly thousands of dozens.

In 1910, the date of April 15 (probably taken a few weeks later) would show some of the same strengthening influence as in June, though probably much less marked, the prior period of flush production having been short and the peak not yet reached, and the low layings of the fall and winter more fully in mind.

The 1920 and 1925 Censuses having been taken as of January 1 following the November to January period of light layings (about a fourth of the March to June rate) the figures reported would be affected strongly downward. The effect of this shift in date is strikingly shown on figure 3 where the line showing egg production, which has gained on the line showing numbers of chickens up to 1900, runs parallel during the decade to 1910 and then suddenly drops far below in 1920 and 1925.

The relative understatement of egg production in 1910 compared to 1900 can only be surmised. It seems certain that layings per hen increased during the decade and hence, that the rate of increase for total production of eggs must have been faster than the rate of increase in number of chickens, but the adjusted Census figures for numbers of chickens show the increase in numbers of chickens and the increase in reported production of eggs as practically identical.

The indicated increase in percentage of eggs laid during the period 1880-1900 was 285%. The increase in number of chickens during the same period was (adjusted) 184%. The average gain in total layings over gain in numbers was 2 $\frac{1}{2}$ % a year. This degree of increase is doubtful, but the average production per hen is certainly increasing; through breeding for high laying strains, improvement in

# NUMBER OF CHICKENS ON HAND JANUARY 1, AND PRODUCTION OF EGGS IN THE UNITED STATES, 1880-1925

U.S. CENSUS FIGURES ADJUSTED

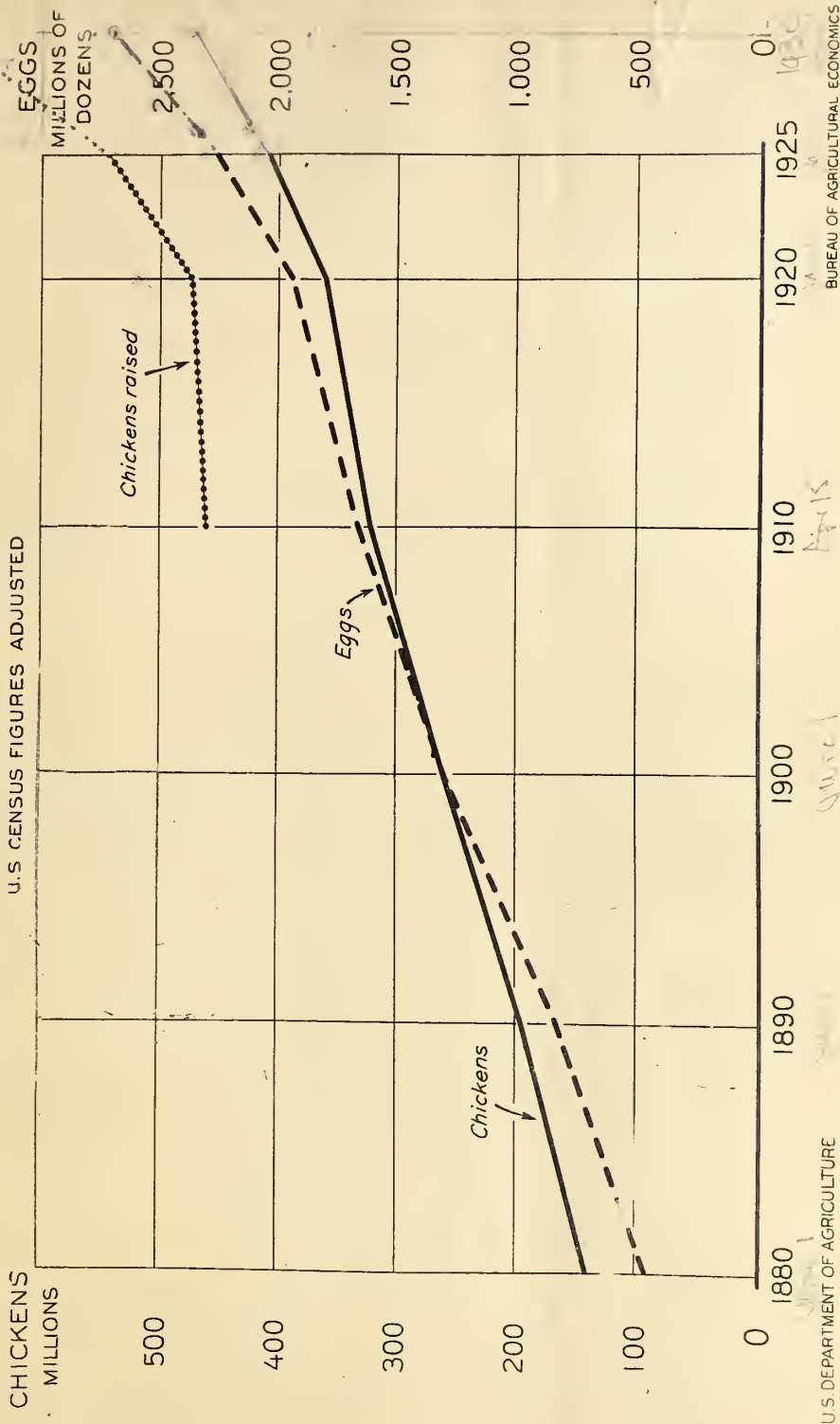


FIGURE 4 (NEG. 19306)

U.S. DEPARTMENT OF AGRICULTURE

BUREAU OF AGRICULTURAL ECONOMICS

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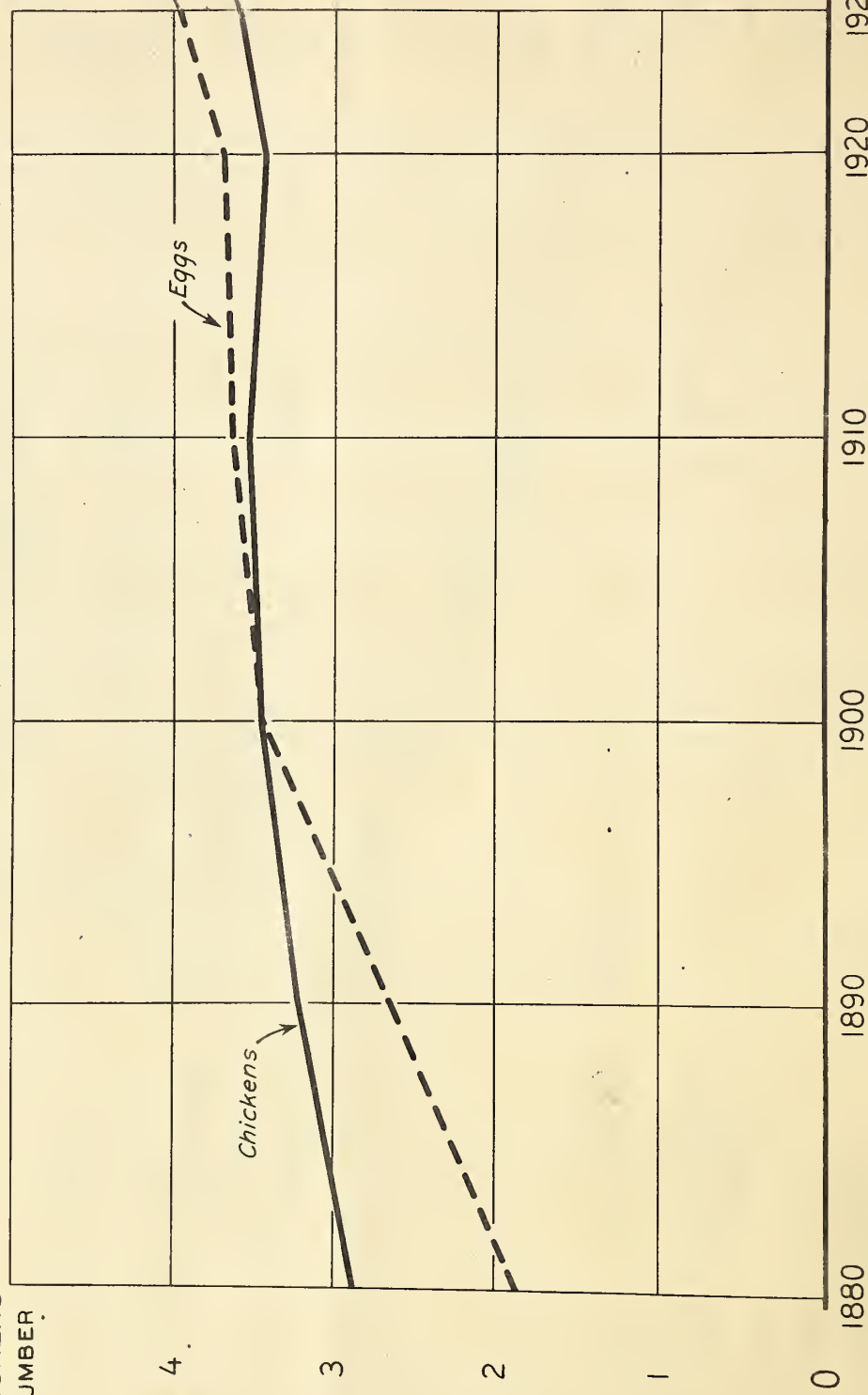
1910-1920  
 Chickens Raised 673,042,052  
 Eggs Produced 2,654,714,155  
 Eliminated from 1910-1920  
 divided to 1911 4,194,714,000

# NUMBER OF CHICKENS ON HAND, AND PRODUCTION\* OF EGGS, PER CAPITA OF POPULATION, 1880-1925

U.S. CENSUS FIGURES ADJUSTED

CHICKENS  
NUMBER

EGGS  
DOZENS



\* EGG PRODUCTION IS FOR YEAR PRECEDING THE CENSUS

U.S. DEPARTMENT OF AGRICULTURE

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FIGURE 5

neg. 14307



sanitary conditions, in the abundance and character of the ration fed and in the increase in the proportion of commercial flocks.

If estimated egg production were to be based upon increase in numbers of birds since 1900 with an additional allowance of  $\frac{1}{2}\%$  annually in rate of layings per bird, the production would amount to 1,656,000,000 dozens in 1909, 1,938,000,000 in 1919, and 2,258,000,000 in 1924. These purely speculative figures on production of eggs for the last three Census years have been used in Table III, and plotted on figures 4 and 5 to show the probable general trend of egg production rather than the absolute quantity of production.

The suggested adjustment without allowance for birds in town flocks, which are probably decreasing, gives total production figures and an indicated annual supply of eggs per person as follows:

Table III. Egg production and annual supply per person indicated by census figures adjusted.

Year	Production	Population	Annual supply per person
	<u>Millions of Dozens</u>	<u>Millions</u>	<u>Dozens</u>
1879	457	50	9.14
1889	820	63	13.02
1899	1,294	76	17.03
1909	1,656	91	18.00
1919	1,938	106	18.23
1924	2,258	115	19.63
1929	2690	123	21.9
1934 Jan	2580	130	19.8

Chickens Raised

The figures on chickens raised reported in 1920 and 1925 show evidence of relative decrease from numbers in 1910 similar to the decrease in reported numbers of eggs produced, and suggest that the January inquiry is so far away from the period of actual production and disposal of the birds that the figures are too conservative. The figures are 460,611,000 in 1909; for 1919 they are 473,201,000, and for 1924 they show 545,848,000. In May of 1910, with the flood of young birds coming on relatively larger figures for raised were probably reported. With the attention given in recent years to increased production of eggs per hen, and the secondary role played by production of chickens primarily for sale, it is to be expected that increase in number of chickens raised would be less rapid than increase in egg production. An absolute decrease of chickens raised per capita from 1909 to 1919, and from 1919 to 1924 is less readily accepted. The Census figures for 1910 and 1924 appear low.

Figure 4 shows the derived figures on number of eggs produced as reported by the Census for 1879, 1889, and 1899 and as interpolated for 1909, 1919 and 1924 from increase in numbers of chickens with allowance for an additional  $\frac{1}{2}\%$  annually for increase in rate of layings. Chickens raised as reported by the Census for 1909, 1919, and 1924 are also shown.

Figure 5 shows the indicated numbers of chickens on hand January 1 and the eggs and chickens produced in the Census years, as shown on figure 4, reduced to a per capita basis.

Further discussion of the probable actual numbers of chickens on hand and production of chickens and eggs is contained in separate sections of this report on production and consumption of poultry, production and consumption of eggs, and value of chickens.

# PRODUCTION AND CONSUMPTION OF POULTRY IN THE UNITED STATES

Farmers eat more than twice as much chicken as townsmen but it is impossible from the available imperfect and scanty data to fix with preciseness the absolute amounts eaten by either.

The Census returns for chickens raised minus chickens sold in 1919 shows an average of about 57 "chickens" retained on the farm in 19.9 and the similar returns for 1909 show about 60 head of "poultry" retained. From these figures allowance must be made for increase or decrease in flocks during the year and for mortality of mature birds. No formal estimates are available to show change of numbers, but both 1909 and 1919 were years when the balance between prices of poultry products and of poultry feeds was about average following several years of price trends unfavorable to producers, and were probably characterized by moderate recoveries in numbers of birds. The annual mortality of mature chickens based on numbers on farms January 1 appears to be in the neighborhood of 10 per cent to 12 per cent, while the mortality of young chicks is from 20 per cent to 30 per cent, according to the available evidence, including judgment reports from crop correspondents. Assuming that "chickens raised" as reported by farmers to the enumerators did not include chicks that had died, the Census indication for 1919 of about 57 chickens remaining on the farm with allowance for a small probable increase in numbers (set at 4 per cent) and for 12 per cent mortality of birds on hand at the first of the year, would point to about 48 chickens eaten on the farm. The similar study for 1909 indicates about 50 head of "poultry" consumed per farm that year. Assuming a small increase over 1919 in the rate of consumption for 1924, which appears reasonable in view of the sharp reduction in numbers of chickens in 1924, and allowing for the smaller number of persons per farm, we secure indication of about 46 chickens consumed per farm that year.

Table IV

Consumption of Chickens on Farms in the United States indicated by analysis of Census reports. (Numbers in Millions.)

<u>Supply</u>	<u>1909 1/</u>	<u>1919</u>	<u>1924</u>
On hand at beginning of year <u>2/</u>	338	346	450
Raised during year <u>3/</u>	<u>488</u>	<u>473</u>	<u>545</u>
Total	826	819	995
<u>Disposal</u>			
Sold	153 <u>3/</u>	141 <u>3/</u>	282 <u>4/</u>
Mortality of mature birds (@ 12%)	41	42	54
On hand at end of year	<u>352</u>	<u>360</u>	<u>409</u>
Total	546	543	745
<u>Supply less disposal.</u>			
Difference: used on farm	<u>280</u>	<u>276</u>	<u>250</u>
Population on chicken farms	28	29	25
Number of farms reporting chickens	5.6	5.8	5.5
<u>Indicated farm consumption</u>			
Birds per person <u>5/</u>	10.0	9.5	10.0
Birds per farm <u>5/</u>	50.0	47.6	45.5

1/ "Poultry", 2/ Census on hand at close of year, adjusted to beginning of year by allowance for estimated change in numbers, 3/ Census, 4/ Estimated, 5/ Units, not millions.

Responses to a quarterly inquiry by the United States Department of Agriculture to 30,000 crop reporters in 1922-3 and in 1928 asking the number of chickens and all other fowls consumed during the month showed about 58 head of chickens eaten per year on such farms.

Discounting these figures for lack of representativeness in the South, where consumption by crop reporters is unquestionably considerably higher than on the average Census farm, they indicate a consumption of about 47 chickens per farm. An analysis of the results of these quarterly inquiries appears in a following section.

Comparison of the results of the Department's quarterly inquiry, with the Census indications of number retained on farms reduced for estimated mortality, are as follows, by geographic grand divisions:

Table IV. Number of chickens used on farm.

Geographic Division	1919 Census		U. S. D. A. correspondents "Consumed"	
	Retained	Consumed <sup>1/</sup>		
	Per farm	Per farm	Per farm	
			1922-23	1928
North Atlantic States	37	33	30	33
South Atlantic States	44	39	51	54
North Central States	63	55	49	47
South Central States	44	39	48	51
Western States	55	48	42	44
United States	57	48	46.8	48

<sup>1/</sup>Retained, minus 12% for annual loss of chickens.

Surveys of the Division of Farm Management (U. S. Department Bulletin No. 1338) covering a period of several years and several thousand families in 30 localities in various states show considerably less, only about 33 birds per family, but most of these are estimates of the housewife covering an entire year and hence, subject to serious memory bias, and examination of some of the material which is supposedly based upon current daily records suggests that the reports for consumption of poultry are not always complete. In any event, the data are too scanty and scattering to draw general conclusions.



For city consumption, aside from (1) the sales of poultry reported to the Census enumerators, we have only three lines of evidence at all comprehensive and none of these very conclusive, viz: (2) some surveys made in 1917 and 1918 by the Bureau of Labor concerning the food consumption of families of workmen in different cities; (3) Interstate Commerce Commission reports since 1920 on car lot freight tonnage of poultry originating on Class 1 lines in the U. S.; (4) data compiled from reports of agents of the Bureau of Agricultural Economics covering market receipts and cold storage holdings of poultry at certain principal cities.

If the reported Census sales in 1919 of 141 million birds be divided by the urban population of approximately 54 million, there results an indicated figure of 2.6 birds per person equivalent to about 9.4 pounds on the basis of a 3.6 pound bird, which appears to be about the average weight of birds marketed. This disregards on the one side the 23 million persons in villages and on farms not reporting chickens, and on the other the production of chickens off farms. If increased by 24 million for production off census farms and divided by the entire population of 77 million off Census chicken farms, the average would be 7.7 pounds per person.

The Bureau of Labor in its surveys in 1917-18 of 8,544<sup>of</sup> workmen's families including 44,158 persons, in 92 cities of 42 states, obtained an average reported yearly consumption of 26.5 pounds of poultry per family, or 5.14 pounds per person on the basis of the average working family of 5.16 persons.

Yearly Consumption of poultry per person by workmen's families

<u>Geographic Division.</u>	<u>Pounds</u>
North Atlantic States	5.60
South Atlantic States	6.41
North Central States	5.19
South Central States	5.06
Western States	5.08
United States	5.14

The survey was rather selective, being limited to families of workmen or laborers.

These surveys were made during the war period when meatless days were in order and at a time when poultry production on farms was at a rather low ebb owing to the unfavorable relation between the cost of the poultry ration and the value of poultry products. Both the surveys and the Census would be subject to material omission as the figures represent an effort by the farmer and the householder to recall details for an entire year, covering in the one case number of poultry raised and sold, and in the other, pounds of poultry consumed.

The Interstate Commerce Commission has published since 1920 figures on freight tonnage originating on the railways of the U. S. The figures furnished cover shipments in solid carloads, and include both live and dressed birds.

The statistics are as follows:

Table VI. Annual carlot shipments of poultry.

Year	Tons Thousands	Pounds (Millions)	Equivalent to No. birds (Millions)
1920	264	528	147
1921	276	552	152
1922	292	584	162
1923	366	732	203
1924	376	752	209
1925	357	714	198
1926	408	816	227
1927	407	814	226
1928	407	814	226

The total shipments, i.e., revenue cars originating on carriers' lines and those received from connecting lines, run 3 to 4 times the above.

No means exists for determining the proportion of poultry sold that moves in carload lots en route to the consumer. The carlot movement of poultry in 1919 is not known, but shipments of poultry, eggs, butter and cheese were 7.5% less, and receipts of poultry at the 4 cities in that year were about 10% less than in 1920.

Considering the heavy marketings by express, water, wagon, and truck even to the large cities and the prevailing custom of marketing poultry by wagon and truck to towns and villages, it seems probable that the marketings in solid carloads might not be much greater than half the grand total of sales.

The indicated receipts for consumption (freight and express) at New York, Boston, Philadelphia, and Chicago, having about  $1/5$  of the consuming population off farms as will be shown below, were in 1919 about  $2/3$  the U. S. car lot shipments shown above for 1920.

The market receipts of 193 million pounds of dressed poultry in Boston, New York, Philadelphia, and Chicago during the year 1919 with allowance for a 15 million pound decrease in carryover, and deduction of 15% for duplicate shipments, divided by the population of slightly over 15 million in these cities, suggests a consumption in that year of about 12 pounds per capita. If allowance is made additional for receipts of 169 million pounds of live poultry (receipts in New York were 147 million) the total indicated consumption of poultry in these cities would be increased to about 22.7 pounds per capita. Similar figures for 1924 indicate about 30.8 pounds. Live receipts are probably greater than allowed.

Table VII. Consumption of poultry in New York, Boston,  
Philadelphia, and Chicago.  
(in millions of pounds)

	<u>1919</u>	<u>1924</u>
Dressed poultry receipts	193	357
Changes in carryover	+ 15	- 28
	208	329
Less estimated duplications and reships	29	36
Total	179	293
Plus receipts of live poultry	169	255
	348	548
Population of 4 cities (1924 = 116% of 1919)	15.3	17.8
Indicated consumption per person	22.7 lbs.	30.8 lbs.

The elements of duplication are mainly in reshipments from Chicago to the other three cities and in a less important outbound movement from cold storage. No definite figures were found covering reshipments from Chicago. A study of relative shipments received at Chicago during the past ten years from Illinois and other principal shipping states, compared with receipts from the same states at Boston, New York and Philadelphia indicates that reshipments from Chicago to the other three cities previous to the last few years may have amounted to as much as half of the Chicago receipts, though this may be excessive. The decrease in reshipments from Chicago has been very rapid in the last few years so that they probably represented less than one-fourth of the shipments from Illinois in 1927. The Chicago outshipments would have been equivalent to possibly 10% or 12% of the receipts of the 4 cities in 1919 and about 5% or less in 1927. No data are available on stocks of cold-storage poultry reshipped out of the 4 cities. As these four cities contained in 1920 about one-third (30%) of the total urban population and held about 60 to 70% of the total United States holdings of frozen poultry some reshipment seems likely. The principal holdings, however, were in Chicago and New York. Chicago reshipments to the other three cities have already been taken care of and New York is preeminently a consuming and not a distributing poultry center. It is probably safe to assume that 50% of the total cold-storage holdings will be consumed in the 4 cities. This would leave about one-fifth of the refrigerated holdings to move out of the 4 cities. The net reduction of cold storage holdings in the 4 cities from the maximum in February to the minimum in the fall is from 40 to 50 million pounds. Studying the storage figures gives a possible maximum of say 10 million pounds for re-shipment, which will be equivalent to about 5% of the total receipts in 1919 and about 3% in 1924. Direct reshipment, except from Chicago, seems likely to be relatively small.

Comprehensive data on receipts being largely limited to the 4 cities, and New York standing so much in a class by itself, it is desirable to separate the receipts of that City from the other three in order that we may obtain from the latter an indication of consumption that can be accepted as more representative of the urban population of the United States at large.



From the following table it will be seen that per capita consumption of poultry in that metropolis is almost double that in the other three cities.

Table VIIa. Consumption of poultry in New York and in the group of three cities; Boston, Philadelphia, and Chicago, 1919 and 1924, in millions of pounds.

I t e m	New York		Three cities	
	1919	1924	1919	1924
Receipts . . . . .	.91	179	102	177
Carryover difference . . .	+6	- 14	+ 8	-14
	97	165	110	163
Less duplications . . . . .	- 5	- 9	- 24	- 27
	92	156	86	136
Plus receipts of live . . .	135	198*	34	57
	227	354	120	193
Increase indicated in receipts . . . . .		56%		54%
Population, in millions . .	7.9	9.2	7.4	8.6
Indicated per person (Lbs.)	28.7	38.5	16.2	22.4
Increase indicated in consumption . . . . .		34%		33%

\*Estimated

Combining the indications of the preceding tables and assigning to the remaining urban and village population, and to the farm population that has no chickens, an average annual consumption of 15 pounds in 1919 and 19 in 1924, slightly less than that shown for the three cities, we obtain an indicated consumption per capita for the entire population not on chicken farms.

Table VIII. Indicated consumption of poultry off chicken farms, in pounds.  
(Based upon shipment receipts at 4 cities)

I t e m	1919			1924		
	Pop- ula- tion	Consumed		Pop- ula- tion	Consumed	
		Per person	Total		Per person	Total
	Mil- lions	Pounds	Million pounds	Mil- lions	Pounds	Million pounds
New York	7.9	29	229	9.2	38.5	355
Three cities (Boston, Phila. and Chicago)	7.4	16	118	8.6	22.4	193
Other urban	39	15	585	45.3	19	862
Village	20	15	300	23.2	19	440
Non-chicken farms	3	15	45	3.1	19	59
Total	77.3	16.5	1,277	89.4	21.3	1,909

Increase in total consumption 39%

Increase in per capita consumption 28%



Accepting that the poultry consumption of the four cities with very large Jewish and European populations is materially greater per person particularly in New York, than with the remaining urban population and fixing consumption by the latter at a tentative figure of 15 pounds in 1919, we have an indicated average of 16.5 pounds for the entire non-farming population of approximately 77 million people, making a total requirement of 1,277 million pounds. If we should accept for the whole urban population an average of 15 pounds per person or a total of 1,135 million pounds, this would require on the basis of 3.6 pounds per bird a total of 315 million birds, more than double the number reported as sold from the farms by the Census of 1919.

There has become available through the reports of poultry producers furnished to the Department of Agriculture in 1927 and 1928 additional evidence bearing upon the degree of incompleteness in the estimates of producers given to the Census enumerators concerning the number of chickens raised on the farm and sold. Reports are received on the first of each month from April to July showing the number of hens and pullets in the farm flock and the number of chicks and young chickens of the current year's hatch. The number of young birds in 1927 at the point of maximum numbers in July, was approximately 165%, or allowing for young birds already sold and eaten, probably about 180%, compared with the number of hens and pullets on January 1. For 1928, a year similar to 1924, with 4% decrease in numbers, the relation shown was 148%, probably equivalent to 160%, and for 1929 it was 169%, equivalent to say, 185%. Mortality after July would tend to be offset by late summer and fall hatchings. The number of chickens reported as raised in 1924 by the Census returns is 133% of the number of chickens on hand at the end of 1924. As there was a reduction of about 7% in the total number of chickens during 1924 this percentage raised to numbers at the end of the year would be equivalent of 124% raised, compared to chickens on hand at the beginning of the year and about 146% compared with hens and pullets on January 1. The relations of 180%, 160% and 185% as shown by crop reporters is 23%, 10%, and 27% greater than the 146 indicated by the Census. The smaller proportion of birds reported by the Census as raised in 1924 might have been due in part to some actual reduction in relative number of chickens raised that year, but as cold storage stocks in the United States show an increase during 1924 of 40 million pounds (equivalent to an increase of 12 million birds) it is evident that the decrease of numbers on farms in 1924 was due in part at least to relatively heavy marketings, and not merely to light hatchings. During 1928, when unfavorable weather as well as low prices for poultry products the previous season led to reduced hatchings, and a 4 per cent reduction in numbers, a decrease of about 8 million pounds, is shown in storage stocks, (equivalent to a decrease of over 2 million birds). Heavier marketings in 1924 are also shown in shipment and receipt records. This check on the completeness of census numbers "raised" affords some help in indicating the fact and the possible extent of omission in the Census figures.

Thus far in this study reference to other poultry than chicken has been avoided, but it must now be considered, as it forms an element in the total supply of poultry out of proportion to its small fraction of about 3% of total numbers on January 1. Turkeys, particularly, though less than 1% in number, average probably 3 times as heavy per bird as chicken when marketed. Also, the turkey hens are held mainly for production of eggs for hatching, and the number of poults per turkey hen in the spring is probably two or three times as great as the number of chicks per hen. Although the mortality of young turkeys has been very high, and the methods to overcome this loss developed in recent years, have not yet been widely adopted in the general farming areas, it would probably be safe to assume that the turkeys raised are at least twice as great in proportion to numbers on

hand January 1, as is true of chickens. If then, we assume that turkeys, which in the Census of 1920, represented 0.9% of the poultry, have twice the increase and three times the weight of chickens, we have an indication of 5.4% of the total supply of poultry meat. The proportion of turkeys now is probably materially greater.

Likewise, geese weigh heavily. If we accept that their .7% of all poultry numbers on January 1 increased in the same proportion as chickens, this would account for say .7% x 2.5 times the weight, = 1.75%. Ducks, etc. would add 1½% additional. Altogether we might have 8% to 10% by weight contributed to the total supply of poultry by poultry other than chicken.

Turkeys, geese, and ducks combined have represented about 4% of the total carlot receipts of live poultry in the New York market during recent years. The proportion of dressed poultry made up of these classes is estimated to be about 8 per cent. The proportion in other cities is thought to be higher but no data on the subject have been found. A contribution of 10% to the total supply is being used in our calculations.

Allowing 10% increase over the reported Census sales of chicken for poultry other than chickens, and allowing also for a production of poultry by flocks not included in the Census enumerations, that is, by town and village flocks, equal to 5% of the Census farm production, the following indications of supply are obtained as a basis for deciding upon needed increase in Census figures of poultry raised to make up the incompleteness of farmers' estimates:

Table IX. Supply of poultry available for consumption per person, from numbers reported by U. S. Census, together with the indicated supply after allowances of certain increases in the supply. (Chickens in 1919 and 1924)

(Birds and pounds in millions, except pounds per person)

I t e m	1909 1/2	1919	1924	1924 / 1919
Chickens raised . . (U.S. Census)	488	473	545	
Retained . . . . . " " "				
(Computed) . . . . .	335	332	263	
Reported sold . . . . . " " " . .	153	141	282	200%
Allowing for equivalent of "other" poultry sold, 10% additional 2/ . . . . .		14	28	
Allowing for poultry produced off farms, 5% of chickens raised on farms . . . . .	24	24	27	
Total . . . . .	177	179	337	
Plus decrease in 1919 and loss increase in 1924 in January 1 cold storage holdings . . . . .		+ 6	- 11	
Supply for population not on chicken farms	177	185	326	



Table IX.

Supply of poultry available for consumption-continued.

Item		1909	1919	1924	1924/1929
Supply for population not on chicken farms	Pounds (on basis of 3.6 pounds birds in 1919 and 1924, and 3.8 lbs. in 1909	672	666	1,175	
	Population not on chicken farms, in millions	64	77	89	
	Pounds per person . . . . .	10.5	8.6	13.2	153%
	Allowing 5% increase in farm production of birds . . . . .	24	24	27	
	Gives - (birds	201	209	353	
	(pounds	764	753	1,273	
	Pounds per person	12.0	9.8	14.3	146%
	Allowing 10% increase in farm production of birds . . . . .	49	47	54	
	Gives - (birds	226	232	380	
	(pounds	858	835	1,370	
	Pounds per person	13.4	10.8	15.4	143%
	Allowing 15% increase in farm production of birds . . . . .	73	71	82	
	Gives - (birds	250	256	408	
	(pounds	950	922	1,470	
	Pounds per person	14.9	12.0	16.5	138%
	Allowing 20% increase in farm production of birds . . . . .	98	95	109	
	Gives - (birds	275	280	435	
	(pounds	1,045	1,008	1,568	
	Pounds per person	16.4	13.1	17.6	134%
<u>FOR COMPARISON</u>					
Shipment receipts indicate --					
Pounds per person			16.5	21.2	128%

1/ Poultry. 2/ To make a comparable basis with shipment receipts.

The indications of 12.0 pounds per person in 1919 and 16.5 pounds in 1925 obtained by increasing Census figures from 10% to 15%, representing about two-thirds to three-fourths as much as is indicated by the analysis of receipts at the 4 cities, would appear to be a reasonable basis of compromise in view of the conflicting evidence.

Consumption of poultry in 1919 in cities was evidently relatively low. This deficiency in consumption is indicated in the comparison of the 1919 figures with those of 1909. Although the 1909 figures relate to "poultry" the numbers of poultry other than chickens represents only a few per cent of the total, say 3% and the proportion by weight (say) 10%, and would still leave the consumption of poultry in that year stand at about 10.5 pounds per person compared with 8.6 pounds in 1919. Consumption rapidly increased with the termination of war-time restrictions, particularly as the urban population, generally speaking, remained quite prosperous during most of the post-war period. The urban population appears to have increased about 16% from 1920 to 1925, whereas, the consumption of poultry per person apparently increased over 30%. The statistics on the receipts of dressed poultry at the principal markets show an increase from a total of 193,113,000 pounds in 1919 to 356,730,000 pounds in 1924, or 85% more, with a

recession to 336,939,000 pounds in 1927 which is still 75% above 1919. As the collection of records of receipts at the four cities was not put on a permanent basis until 1920 it is possible that the data for the few preceding years may not have been quite as complete, but those in charge of the work consider that the omissions for 1919 are not material.

The data on receipts of poultry at the four markets are shown in the Department's Yearbook for 1928, pages 1001 to 1004, and stocks of frozen poultry on page 1005. Prices are shown in adjoining pages. Stocks of frozen poultry in the four cities on January 1 for the years 1920 to 1929 were as follows:

1920 . . . .	59,192	1925 . . . .	89,853
1921 . . . .	56,421	1926 . . . .	74,284
1922 . . . .	70,501	1927 . . . .	92,723
1923 . . . .	65,318	1928 . . . .	71,488
1924 . . . .	62,058	1929 . . . .	67,697

Recapitulation of Evidence  
On consumption of chickens (or poultry)

Table X. Consumption on farms.

Indication	Per Person	
	Birds	Pounds
<u>U. S. Census,</u> (On farms producing chickens.) Chickens raised less those sold, less replacements for 12% mortality of old birds, gives, 1919 (chickens) 1909 (poultry)	9.5 10.5	34.2 38.0
<u>U. S. Department of Agriculture Crop Reporters</u> Quarterly inquiry on number used on farm during preceding month, in 1922-3 in 1928	10.3 10.6	37.1 38.2
<u>U. S. D. A. Div. of Farm Management,</u> Bulletin 1338, farm families in 30 localities in 21 states. (householders guess on annual consumption)	6.6	23.8

Table XI. Consumption off farms.

Indication	Per Person for year	
	1919	1924
	Pounds	Pounds
<u>U. S. Census, 1919</u>		
Chickens "sold" (Farmers guess) If allotted to strictly urban population of 54,000,000 only	9.4	15.1 (est.)
If increased by 5% of Census production for production missed (off farms etc.) and allotted to entire population of 77 million not on chicken farms in 1919 and 39 million in 1924.	7.7	11.3 (est.)
Allowing 10% additional for other poultry	8.5	12.4 (est.)
<u>Bureau of Labor 1917-8: Inquiry of 8,544 Workmen's families in 92 cities in 42 states (householders' guess of year's consumption)</u>	5.14	
<u>Interstate Commerce Commission</u>		
Carlot freight shipments of poultry 1920 alone if allotted to entire population not on chicken farms	6.9	8.5 <u>1/</u>
<u>Survey in 1926 of 6 cities in Pennsylvania:</u>		
Based on weekly averages, in April		23.6
Applied to entire season, with seasonal trend		36.0
<u>Poultry receipts; New York</u>	28.7	38.5
Boston, Philadelphia, Chicago (less duplication)	16.2	22.4
Above 4 cities combined	22.7	30.8
Accepting for remaining urban	15.	19.
Gives for entire urban population	16.5	21.3
<u>Farm Flock Monthly Inquiry.</u>		
Proportion of chicks and young chickens on hand July 1 to hens and pullets of laying age on hand January 1, 1927, 1928, and 1929 compared with 1924 Census "raised" per hen and pullet is greater than shown by Census, by 23%, 10%, and 27%, respectively.		

1/Omits express, truck, etc.



## PRODUCTION AND CONSUMPTION OF EGGS IN THE U. S.

In attempting to determine production of eggs, the Census reports should have first consideration. Census numbers of eggs laid do not represent an enumeration of actual numbers, but are mainly estimates based upon the memory and judgment of the farm (and his wife), or guesses of the enumerator. Presumably the enumerator meets some farmers who keep records, but these would be few. The Census has been taken at varying periods of the year, those for 1879, 1889, and 1899 as of June 1 following at the close of the heavy laying season, that for 1909 as of April 15 following, at the peak of the laying season, and those for 1919 and 1924 as of January 1 following a period when layings are smallest. The date of the actual enumeration probably averaged some time after these dates. The computed average of layings, per hen (and pullet of laying age) on hand at the end of the Census year, has been rather uniform, however, for the three Census periods, namely, 66.6, 64.4, and 66.1, which is not wholly illogical inasmuch as the conditions tending to increases or decreases in layings would also tend to some corresponding increase or decrease in numbers of chickens. The number of hens on hand at the close of the years 1909 and 1919 was probably a few per cent more than at the beginning of those years, while in 1925 the number on hand at the close of the year was considerably less than at the beginning. If layings had been at the normal rate in 1924 this would have resulted in a relatively large laying, per hen on hand at the end of the year, but as just suggested, the tendency to increase or decrease runs with production both of birds and eggs. The 1924 season was extremely unfavorable to egg layings as well as to poultry production and the low rate of laying harmonized with the lower number of hens on hand at the end of the year.

The annual production of eggs per hen is commonly believed to have increased considerably since 1909, owing to improvements in flocks and in poultry management, but the Census returns quoted show less per hen both absolutely and relatively in 1919 and 1924, than in 1909. This is probably due to the difference in date of enumeration.

### Analysis of the Census Figures:

Table XII.

Census farm production of chicken eggs, per hen and pullet of laying age.

Item	1909 (April 15, 1910 Census)	1919 (Jan. 1, 1920 Census)	1924 (Jan. 1, 1925 Census)
Census production of eggs (Doz.)	1,574,979,415	1,654,044,932	1,913,245,129
Chickens on hand date of Census	280,340,957	359,537,125	409,290,849
Adjusted to Jan. 1	<u>1/</u> 333,500,000		
Eggs per chicken Jan.1, (Dozens)	4.72	4.59	4.67
Eggs	56.6	55.1	56.0
Eggs per hen and pullet of laying age, Jan. 1	66.6 <u>2/</u>	64.8 <u>3/</u>	66.0 <u>3/</u>

1/ Assuming that of 100 chickens on January 1, 85 are hens and pullets of laying age and 15 "other", of which 77 hens and pullets and 7 "other" will remain in May; or, that at the Census date there would remain 91 per cent of the hens, 45 per cent of the "other" and 84 per cent of all chickens on hand January 1. The estimated change in numbers of hens and pullets is based upon the Department's monthly returns of farm flocks. Change in number of "others" based partly on New York school census of 1917 showing 5 per cent of roosters in flocks on April 21.

It is assumed that the average date of the U. S. Census enumeration was in May. The allowance of 7 per cent for "others" in May may be too high. The roosters would decrease somewhat during May and June and there would be little else than these remaining under "other".

2/ Hens and pullets of laying age make up about 85 per cent of all chickens on January 1 according to annual livestock distribution schedules for 1927 and 1928. "Other" chickens include some pullets not yet of laying age on January 1. The proportion of "other" chickens, exclusive of pullets, is probably in the neighborhood of 10 per cent leaving the potential layers, i.e., hens and all pullets, equal to about 90 per cent of all chickens on hand January 1. The proportion of "other" chickens doubtless varies from year to year.

3/ If an allowance is made for increasing yield per hen since 1909, of 5 per cent by 1919 and 8 per cent by 1924, the average per hen, and pullets of laying age, assuming other conditions unchanged, should have been  $66.6 \times 105 = 70$  eggs in 1919 and  $66.6 \times 108 = 71.9$  in 1924. If Census numbers of hens and pullets were adjusted to the numbers on hand at the beginning of the year, the production per hen would have been about 62 in 1924, and probably about 69 and 67 in 1909 and 1919.

#### Layings per hen on farms of Crop Reporters.

For four years the Division of Crop and Livestock Estimates has been securing reports on the first of each month from its regular crop reporters, covering the number of hens and pullets of laying age on hand and the number of eggs laid the preceding day. From these reports indications of production have been drawn for the four years 1925, 1926, 1927, and 1928 showing the average production per hen and pullet on hand on the first of January of each of these years to have been on these farms approximately 104, 112, 109, and 104.

The reported Census production per hen would need to be increased by about 60 per cent to reach the rate per hen shown by these monthly returns from crop reporters.

Crop correspondents are recognized as being better than average farmers and poultrymen and hens on their farms may be expected to produce more eggs. It does not appear likely, however, that the total annual production per hen as between birds in flocks on well managed farms and in those on ordinary farms, varies as greatly as is commonly thought. The hens in better managed flocks probably lay considerably more eggs during the season of high prices. Even if we assume that the layings per hen as reported by crop correspondents, are 25% higher than in average farm flocks, the decreased figure of about 84 thus indicated for farm flocks would still be about 25% higher than the Census figures.

### Urban receipts and consumption

Some light on probable production is available from figures on consumption. Data are available showing the receipts at the 5 principal cities and the stocks in cold storage in the United States. The data are analyzed below.

Table XIII. Indicated consumption of domestic eggs in metropolitan areas of 5 principal cities.

Derived from analysis of commercial receipts, stocks, etc.

I t e m	Receipts for 5 cities; Boston, New York, Philadelphia, Chicago, San Francisco		
	1919	1920	1924
Reported market receipts of eggs, dozens	440,580,000	388,380,000	462,180,000
Add, cold-storage decrease in Jan. 1 carryover in 5 cities		19,200,000	14,520,000
Total	440,580,000	407,580,000	476,700,000
Less cold storage increase in Jan. 1 carryover	13,350,000		
Less duplication owing to reshipments out of Chicago (Est.)	60,000,000	40,000,000	50,000,000
Less Foreign Exports from N.Y.	8,000,000	3,700,000	5,000,000
Total Deductions	81,350,000	43,700,000	55,000,000
Leaving for consumption, (Doz.)	359,230,000	363,880,000	421,700,000
Leaving for consumption, (Eggs)	4,310,760,000	4,366,560,000	5,060,400,000
Population (1/1/20)	16,160,000	16,160,000	18,750,000 <sup>1/</sup>
Per person annually (Eggs)	267	270	270
Per person daily (Eggs)	.731	.74	.74

<sup>1/</sup> Estimated.



Elements of possible duplication might reduce the preceding, but the unrecorded receipts by truck in 1919, while not as large as now, would be an offset. Although the truck receipts are obtained and included where possible they are admittedly very incomplete. Records of commercial truck receipts have been collected at Philadelphia since 1927, and such records are now being compiled in other cities. Increasing receipts by truck may account for a per diem consumption above that indicated by receipts shown above.

Table XIV. Indicated consumption of eggs in 1919, by population not on farms reporting chickens; on the basis of .736 eggs daily per person. .736 = average of indicated consumption in 1919 and 1920, as shown by table XIII.

Area or group	Population	Eggs Consumed
<u>Metropolitan areas</u>		
5 principal cities	16,160,304	4,345,000,000
24 cities over 200,000	<u>13,078,278</u>	<u>3,525,000,000</u>
29 cities over 200,000 (Cumulative)	29,238,582	7,870,000,000
39 cities 100,000 to 200,000	<u>7,648,379</u>	<u>2,060,000,000</u>
68 cities over 100,000 (Cumulative)	36,886,961	9,930,000,000
Towns 2,500 to 100,000	<u>16,534,489</u>	<u>4,445,000,000</u>
Total urban population	<u>53,421,450</u>	<u>14,375,000,000</u>
<u>Rural population</u>		
In villages of less than 2,500	20,047,000	5,393,000,000
On farms not reporting chickens	<u>2,995,000</u>	<u>807,000,000</u>
Total rural not on farms reporting chickens	<u>23,042,000</u>	<u>6,200,000,000</u>
<u>Total population not on farms reporting chickens</u>		
In 1919	76,463,450	20,575,000,000
In 1924	<u>89,000,000</u>	<u>23,909,000,000</u>
<u>Total population on basis of a lower assumed consumption of .70 eggs daily per person</u>		
1919		19,595,000,000
1924		<u>22,740,000,000</u>

### Indications of Consumption from Tonnage Movement.

Shipments of solid carlots of eggs originating on Class 1 Railways in the United States as reported by the Interstate Commerce Commission since 1920 have been as follows:

(Expressed in total number of eggs at 40 cases of 30 dozen each per ton)

1920	7,718,000,000	1925	8,510,000,000
1921	7,940,000,000	1926	9,274,000,000
1922	8,140,000,000	1927	9,374,000,000
1923	8,640,000,000	1928	9,138,000,000
1924	8,237,000,000		

The figures for 1920, the first year for which the record is available, are equal to about 64.4% of the total eggs moved off farms in 1919 as reported by the Census for that year.

The proportion of eggs consumed off farms that are shipped in solid carlots from point of original consignment is unknown. A large proportion of the eggs received in the large cities is so moved, but for smaller cities and towns the proportion is very much less, local receipts increasing rapidly to practically 100% in the smaller towns and villages. Express shipments are relatively very large. Even in New York City, where freight shipments would be expected to reach a maximum proportion, the receipts by express are equal to about 20% of the receipts by freight. At most markets, probably least so at New York, the receipts by truck are an increasingly important factor. Truck receipts recorded in Philadelphia in 1928 amounted to 18% of all recorded receipts in each of the months of April, May, and June, but were relatively slight during the winter. A large volume of truck and wagon deliveries direct to retail stores, hotels and residences would not get into the record. The reported fraction for the entire year was 13%, but 66% of the receipts shown from Pennsylvania and Delaware and 33% of those from Maryland were by truck. In 1929 the proportion of the total was 19%, with Pennsylvania 72, Delaware 85, and Maryland 58. From the few available incomplete records on truck and express receipts it appears likely that even in the five cities, receipts through these two channels may equal over a third of the total receipts. In the majority of other cities one might expect the percentage to run up to from one-half to two-thirds or more. In the towns and villages with more than half of the population not on chicken farms, the bulk of all the eggs would come in by truck or wagon. Judging from the sketchy evidence available the receipts other than by solid carloads at this time would probably equal or exceed two-thirds of the total eggs consumed elsewhere than on chicken farms. If carlot shipments were equal to as much as 36% of the total sales by farmers and others in 1924, then the consumption of eggs off chicken farms would be with allowance for reduction in cold storage stocks, about .73 per day.

The United States Bureau of Labor surveys in 1922-23 (B.L.S. Bul. 357) show consumption per person of 150 eggs per annum, equal to .39 per day. This figure was obtained by inquiry of housewives for the quantity used in the household during the year and are subject to omission from faulty memory. Also, being taken during the period of war economy to conserve food, minimum indications might be expected. The inquiry being limited to wage earners with modest incomes and being selective in other respects affected the results. The indication from this survey is even lower than the Census indication. It does not appear to afford very dependable indications in arriving at conclusions on average urban consumption since the war.

Reviewing the evidence on consumption of eggs off farms having chicken,  
we have the following showing.

1. Census reports sold (in 1919)	1,010,813,258	doz.
or	12,129,759,096	eggs
Plus 5% production off farms	<u>992,427,000</u>	"
Would amount to	13,122,186,096	"
For a population of 77 million =	170 per year	
	.466 per day	

Other indications show:

2. Receipts at 5 cities point to .736 per day
3. Interstate Commerce Commission  
 carlot movement if accepted  
 as 36% of all sales, in 1924: .73 per day
4. Bureau Labor Survey, (impossibly  
 low) .39 per day

Farm Consumption of Eggs.

The Census indications for 1909, 1919, and 1924 are analyzed in the following table:

Table XV. Chicken eggs used on farms; as indicated by Census reports.

I t e m	Census, 1909 (April 15, 1910)	Census, 1919 (Jan. 1, 1920)	Census, 1924 (Jan. 1, 1925)
Number produced (all eggs) = (chicken eggs) =	1,591,311,371 doz.		
Reported sold	1,574,979,416 " 926,465,787 "	1,654,044,932 doz. 1,010,813,258 "	1,913,245,129 doz.
Leaving on the farm "	664,845,584 "	643,231,674 "	
Equal to "	7,978,147,008 eggs	7,718,730,088 eggs	
Estimated hatching eggs (from chickens reported "raised" and 50% hatch)	921,222,402 "	946,603,918 "	1,091,696,070 eggs
Left for use as food on farm	7,056,924,606	6,772,176,170 "	
Farms reporting chickens	5,578,425	5,837,367	5,505,617
With a farm population of	23,140,000	28,620,000	25,000,000
Indicated per farm con- sumption	1,265 1/5	1,160 2/9	
Size of farm family	5.04	4.90	4.54
Used daily per person	.685	.648	
1/ All eggs. 2/ Chicken eggs.			



There is evidence that the farm consumption is considerably greater than would be cared for by the eggs available for farm consumption as reported by the Census.

Four quarterly inquiries on farm consumption by the United States Department of Agriculture, of 30,000 crop reporters in 1922-23 and in 1928, asking each time for number of eggs consumed during the preceding week, gave figures indicating for the United States an average consumption of about .85 eggs daily per person in 1922-23 and 1.00 per person in 1928. These quarterly inquiries are discussed in detail in a later section.

A daily record of eggs consumed by farm families in 30 farming communities during a period of 5 years, assembled by the Division of Farm Management and published in Department Bulletin 1338, gave an average of 1,416 eggs per family, or approximately .77 eggs daily per person for all records. This series of surveys was limited to one or two counties in from 8 to 12 states annually during the year 1918 to 1922 involving 21 states in all. The yearly averages ranged from about 1,056 per family in 1918 when half the areas were in the east and south to 1,752 in 1922 when most of the areas were in the north central and western states.

A daily farm consumption of about .80 eggs per person seems a reasonable compromise from these lines of evidence, if we should disregard the Census.

Assuming an average daily farm consumption of eggs per person of 0.80, and a consumption elsewhere of 0.70, we secure an indicated total consumption for the entire population as set forth in table XVI.

Table XVI. Indicated egg consumption in United States, 1919 and 1924 on basis of consumption per person of .80 egg on farms and .70 egg elsewhere.

	1919	1924
Farms producing eggs	5,837,367	5,505,617
Persons per farm	4.90	4.54
Population	28,620,000	25,000,000
Consumption @ .80	8,357,000,000	7,300,000,000
Remaining population	77,091,000	88,727,000
Consumption @ .70	19,696,750,000	22,700,000,000
Total population	105,711,000	113,727,000
Consumption	28,053,750,000	30,000,000,000
Indicated consumption per person exclusive of eggs for hatching:		
Yearly	265	274
Daily	.726	.723



We may compare the figures in Table XVI, showing per capita and total production for the entire population as indicated by the preceeding analysis of available material with the per capita and total drawn from the Census shown in Table XVII below:

Table XVII. Indicated egg consumption in United States, 1919 and 1924, from eggs available from census reported production.

	1919	1924
Production of eggs	13,848,539,000	22,958,942,000
Add 5% (est.) produced off farms	992,427,000	1,147,947,000
Total . . . . .	20,840,966,000	24,106,889,000
Less hatching eggs (est.)	946,604,000	1,091,696,000
Leaves . . . . .	19,894,362,000	23,015,193,000
Providing per person for population of . . .	105,711,000	113,727,000
Yearly . . . . .	189	202
Daily . . . . .	.518	.554

The production indicated per farm in table XVII provides a supply very much below that indicated as needed by the analysis of city receipts and farm consumption based on the other evidence.

The city receipts for recent years do not reflect the increased consumption by the urban population which is generally believed to have occurred, although such an increase from 1919 to 1924 is reflected by the Census figures. This is probably due to the great increase in the proportion of receipts by truck, which took place in the interval and still continues. This truck movement has been only recently included in receipts and this only at a few points and imperfectly. It was not included at all in the receipts for 1924.

In order to better visualize the amount of increase needed in Census numbers to meet consumptive requirements, table XVIII shows the Census supply remaining for the population not on chicken farms, after deducting a conservative supply for use on chicken farms, and the supply that would result from varying percentages of increase to the reported Census production.

Table XVIII. Eggs available for population not on chicken farms after deducting eggs for farm use.

(Based on production reported by U. S. Census)

I t e m	1919	1924
	Eggs	Eggs
Total Production Reported by Census	19,848,539,184	22,958,940,000
Plus 5% for non-farm production	<u>992,426,959</u>	<u>1,147,947,000</u>
Total production	20,840,966,143	24,106,887,000
Less eggs for hatching (544Mx2)	<u>1,088,000,000</u>	<u>1,254,000,000</u>
Leaves	19,752,966,143	22,852,887,000
Needed for population on chicken farms		
@ .80 per diem		
28,600,000 persons in 1919	8,351,200,000	
25,000,000 " " 1924		7,300,000,000
Remaining	11,401,766,143	15,552,887,000
Plus or minus decrease or increase in cold storage	<u>-288,720,000</u>	<u>+315,720,000</u>
Giving an available supply of which, divided by remaining population not on chicken farms	11,113,046,143	15,868,607,000
of 77,000,000 in 1919 and		
89,000,000 in 1924		
Gives per person, yearly	144	178
daily	.394	.494

If to allow for under-estimates given the enumerators, the Census production were increased in varying percentages the supply for the population not on chicken farms would be increased as shown in the following table:

Table XIX. Eggs available for consumption by population not on farms reporting chickens if Census production is increased by varying percentages.

Per cent of Increase		Resulting Supply of Eggs					
		1919			1924		
On Farms	Off Farms	Quantity	Per Person		Quantity	Per Person	
			Yearly	Daily		Yearly	Daily
0% : 5%		11,113,046,143	144	.394	15,868,607,000	178	.494
15% : 5%		14,086,000,000	183	.50	19,310,000,000	217	.59
20% : 5%		15,082,000,000	196	.54	20,460,000,000	230	.63
25% : 5%		16,075,000,000	209	.57	21,608,000,000	243	.67
25% : 10%		17,068,000,000	222	.61	22,756,000,000	256	.70

#### Recapitulation of evidence.

##### Layings.

Census reports show layings per chicken, adjusted to

layings per hen and pullet of laying age, Jan. 1 ..... 1909 = 66.5  
 1919 = 64.8  
 1924 = 66.0

Crop reporters show layings by farm flocks per hen

and pullet of laying age on January 1 ..... 1925 = 104  
 1926 = 112  
 1927 = 109  
 1928 = 104

##### Consumption on Farms:

Census production less sales and hatchings leave for farm consumption per person approximately 0.685 per day in 1909 and 0.648 per day in 1919.

Quarterly inquiry of crop correspondents in 1922-23 and 1928 asking number of eggs consumed during past week, indicates consumption of 0.85 and 1.01 eggs per person daily. Surveys by Farm Management and Cost Division of the Department of Agriculture in scattered localities indicate 0.77 per day.

##### Consumption of eggs off farms.

The Census report of eggs sold in 1919, plus 5 per cent of Census production to allow for eggs produced off farms would provide. 0.466 per person per day. Or, Census eggs produced less farm use at 0.8 leaves 0.394 per person per day. Bureau of Labor Survey shows only ..... 0.39 per person per day.

Penn. State Survey, 6 cities, 2,404 families

(April and December) ..... 0.94 per person per day.

Receipts in five cities, Boston, New York, Philadelphia, Chicago, San Francisco, indicate

consumption ..... 1919 of 0.731 per person per day.  
 1920 0.74 per person per day.  
 1924 0.74 per person per day.

Carlot tonnage of eggs equalled about 64% of eggs reported by Census as "sold" in 1919, but considering receipts by truck, express, etc., carlot movement was probably nearer 34% of the total movement, indicating that the Census total is inadequate.

It appears obvious that the number of eggs reported to the Census enumerators are insufficient to provide the supply needed for food on farms, for hatching, and for the population not on chicken farms. The volume of production off farms is very uncertain, but is commonly thought to be relatively small, probably less than 5 per cent. Considering that the Census definition of a farm would include practically all commercial poultry flocks, these figures would appear to be high enough, although the probability that a great many commercial flocks not on farms are overlooked by the Census enumerators gives some support to the views of those who consider that production off farms might be as much as 10 per cent as great as that on farms.

The body of available statistics on commercial movement and city receipts, while valuable and significant, is not sufficiently comprehensive and accurate to justify accepting the indications of consumption and consequent needed production to be drawn from these as a substitute for the imperfect Census enumeration. On the other hand they are sufficiently positive to justify a material increase over the Census figures. The extent of this increase must depend on the judgment of the estimator.

If an average consumption of 0.80 eggs per person per day for the population on chicken farms be accepted as reasonable, the increase that would be required over the production on farms to provide a stated daily supply per person for those not on chicken farms is indicated in the table at the head of page 39.



CONSUMPTION OF POULTRY AND EGGS ON UNITED STATES FARMS PRODUCING  
CHICKENS

as indicated by the results of quarterly inquiries of about 30,000 crop reporters of the U. S. Department of Agriculture in 1922 and 1923, and in 1928.

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Two series of quarterly inquiries concerning farm consumption of poultry and dairy products have been addressed to the list of crop reporters of the Department of Agriculture, the first being sent out on July 10 and October 10, 1922, January 10 and May 14, 1923, and the second at approximate dates of March 10, May 25, August 12, and October 19, 1928. Both of these inquiries were made by the Division of Crop and Livestock Estimates in cooperation with the Dairy and Poultry Division of the Bureau of Agricultural Economics.

The figures presented in the following tables have been drawn from a preliminary study of the computations of the quarterly inquiries in 1928 and from a review of the original material covering the quarterly inquiries in 1922 and 1923. The method of computing used in handling the two inquiries might show averages from the 1928 inquiry 1 to 3 per cent lower than the other due to the fact that, in the 1928 inquiry, the quantities reported used were divided by the total number answering for each.

The average number of persons reported per farm was practically identical with the number on Census farms, but it is known that crop reporters, most of whom are farm owners, are as a class somewhat more prosperous than average farmers and might consume more chickens per year than the average family. In the South, the figures of crop reporters would certainly run too high to be applied to all Census farms which include a large proportion of tenants classed by the Census as farm operators, but not represented among the Department's crop reporters. On the other hand, there would be some omissions from faulty memory, but as the period to be remembered is only one or two months, this would be slight, probably not greater than 5 per cent or 10 per cent. The schedules were mailed in January, May, July and October, and the results are, of course, less representative than if made monthly. Part of the reports presumably relate to the months named and part of them to the preceding months of December, April, June, and September. In spite of these and other possible weaknesses, the results should indicate reasonably well the relative consumption by seasons in the different states, except for small states having too few returns to give stability to the averages, and except for the South as compared with the North and West.

### Farm Consumption of Poultry

The 1922-23 schedules asked for "total number of chickens or fowls consumed in your household during the past month". In 1928 the schedules asked, "number of chickens of all kinds consumed in your household during the last month". The lack of exact conformity, either in language or in the dates of sending out the two series of inquiries, makes comparison between them difficult. The first inquiry would presumably include not only chicken but all other poultry. Those engaged in the business of marketing poultry apply the word "fowl" to mature hens, but to practically all other persons the word "fowl" covers all kinds of poultry. The "past month" and "last month" are practically synonymous although "past month" probable carries more of a suggestion of the past thirty days, and the "last month" the last previous calendar month. In case such a distinction were observed by any considerable proportion of the reporters the period reported would tend to precede the date of the inquiry for the first series by a few more days than for the last, but depending somewhat on the exact date of the inquiry.

The inclusion of "fowl" in the first inquiry probably does not seriously affect the comparability for the inquiries in the months May to July, when relatively few turkeys, ducks, geese and other types of poultry than chickens are eaten, and the effect in October (covering consumption in September) is probably not very material. But during the holiday season, as reflected in the January report for 1923, their inclusion would tend to increase the total number materially for that period, possibly as much as 10%. The effect upon the year's indicated total number consumed would hardly exceed 2% or 3%. While the total number of other poultry than chickens is shown by the Census to be only about 3% of the number of chickens on January 1, they probably make up at least 5% of the total number in the summer and autumn, and a larger proportion of the total is marketed.

The difference in dates of the winter and mid-summer inquiries makes close comparisons of the two series for these seasons impossible. The returns for May and October, which are reasonably comparable as to date, indicate that consumption in 1928 was slightly greater than in 1922-3. In the South the difference of a week or two in the date of the May inquiry accounts, no doubt, for part of the large increase shown in those States, as the number of young birds reaching the fryer stage is rapidly increasing during early May. It seems unlikely that the small difference in the date of the October inquiry would affect the number used. It will be observed that evidence of differences in consumption shown by the two October inquiries is neither marked nor uniform in the different states, although some increase for the country as a whole is indicated.

Table XX shows the figures as reported by geographic grand divisions. The figures for the Southern States and the United States are adjusted to allow for the smaller consumption on average Census farms than on the farms of crop reporters in the South. The U. S. averages are secured by weighting the consumption figures by the Census number of farms reporting chickens. The figures as reported by states are shown in Table XXI. Adjustments for the different southern States



expressed in percentages of the reported figures, were made as follows: West Virginia 96, Kentucky 90, Maryland 86, Delaware and Tennessee 85, Virginia, Oklahoma, and Florida 84, North Carolina 78, Texas 77, Arkansas 76, Alabama 72, Louisiana 70, Georgia 69, Mississippi and South Carolina 64. Adjustment was made on the basis of a compromise figure between a discount in consumption by the negro population of two thirds, and by the tenant population of one half, that shown by the reporters.

The relative price of chickens in October, 1928 to that in 1922 is about 22.1¢ to 19.3¢ or nearly 15% greater. But the increase in the farm prices of beef and lamb during the same period were relatively considerably greater than this and the price of all meat animals about 40% greater. Data are too meager to judge of the amount of influence on farm consumption of prices being received for chicken. Figure 6 exhibits the trend of consumption on farms in 1922-3 and 1928, according to the quarterly returns of crop correspondents, in conjunction with the trend of the index prices of chicken and meat animals at the same dates. The relative increase in price of chicken was much less than that of meat animals which might be expected to encourage greater consumption of chicken. An increase in 1928 is indicated but it is slight. Comparable data for a term of years are needed to determine the degree of relation between these two factors. As the difference in the amount of chicken consumed in 1922-3 and in 1928 was evidently not very great the differences in the dates when the questions were asked in the two series assist to fix with greater assurance the character of the usual curve of seasonal farm consumption. By reading the indicated consumption at the mid-month periods as shown by the freehand curves drawn through the plotted quarterly reports for the United States an indication of average consumption of about 47 chickens per capita is obtained for 1922-3 and about 48 for 1928. From similar charts for the different geographic divisions as shown in figure 7, the monthly figures shown in Table XXII are secured.

Figure 8 shows for Illinois the consumption curves from the quarterly inquiries of 1928 and 1922-3 in comparison with a curve representing the monthly consumption in 1928 on chicken farms reporting to the Poultry Department of the Illinois State University.

The considerably smaller consumption of chickens shown by flock owners reporting to the Illinois Poultry Extension Service than by crop reporters is in marked contrast with the close agreement shown in figure 11 by these two classes of reporters for consumption of eggs. The Extension Service returns represent larger poultry flocks, with about 15 per cent of them in the class of commercial flocks, while less than 2% of the flocks of crop reporters in Illinois are of commercial size. Several reasons would exist for a lower consumption of poultry by owners of commercial flocks: viz, flocks of the laying breeds rather than meat birds, few or no males in commercial flocks and unwillingness to slaughter layers, closer access to sources of fresh meat supply from frequent location of large flocks in the vicinity of the towns and finally, the lack of desire for chicken that tends to result from the constant contact with the birds, that is incidental to the care of commercial flocks, just as the cook has often no appetite for the dinner.

Table XX.

Chickens Consumed Per Person on U. S. Farms, During  
Previous Month, In each Geographic Division, as Reported  
By Crop Correspondents Quarterly, 1922-23 and 1923.

Geographic division	Consumption of chicken reported per person for previous month - Date shows when inquiry was mailed out.							
	1-22-23:3-10-23	5-14-23:5-25-23	7-10-22:8-12-22	10-10-22:10-19-23				
New England	.538	.328	.326	.317	.336	.410	.616	.581
Middle Atlantic	.630	.502	.421	.484	.550	.686	.766	.902
East North Central	.643	.474	.443	.458	.743	.969	1.29	1.24
West North Central	.724	.458	.453	.509	.901	1.45	1.71	1.62
South Atlantic	.812	.695	.732	.846	1.45	1.72	1.29	1.32
South Atlantic Adjusted	.626	.536	.564	.652	1.12	1.32	.99	1.02
South Central	.719	.597	.660	.812	1.57	1.82	1.39	1.37
South Central Adjusted	.561	.466	.515	.634	1.22	1.42	1.08	1.07
Rocky Mountain	.612	.537	.460	.500	.673	1.34	1.40	1.42
Pacific Coast	.680	.535	.512	.716	.850	1.04	1.15	1.02
U. S.	.712	.556	.569	.663	1.15	1.45	1.35	1.33
U. S. Adjusted	.624	.482	.488	.566	.974	1.25	1.19	1.18

Table XX. shows the variation in reported consumption of chickens per person for the different grand divisions, both the original averages and the adjusted averages for the southern states and the United States.

The dates shown in the box heads are in each case the month, day, and year, for instance, 1-22-23, meaning January 22, 1923.

Table XXI shows the averages of the actual figures of consumption per person as reported by crop reporters in each state permitting comparisons as between the various states in the different geographical divisions. Figures reported for most Southern States are relatively too large, compared with other sections. Figures for small states, with few returns, are not very dependable.



Table XXI.

Chickens Consumed Monthly Per Capita on U. S. Farms as  
Reported by Crop Correspondents Quarterly, 1922-3 and 1928

State	Average number of farms reporting		Average number persons per farm (census) 1-1-25	Monthly consumption reported of chickens per capita.							
	1922-3:1923			Upper date shows when inquiry was mailed out.							
				Lower shows assumed mid date of month covered.							
		1-22-23	3-10-23	5-14-23	5-25-23	7-10-22	8-12-28	10-10-22	10-12-28		
		1-7-23	2-25-23	5-1-23	5-12-23	6-25-22	7-27-28	9-25-22	10-6-23		
(The date figures refer to month, day and year.)											
Mo.	117	100	3.32	.43	.27	.24	.30	.27	.36	.65	.50
N.H.	48	55	3.67	.51	.30	.33	.36	.30	.50	.51	.65
Vt.	74	90	4.07	.43	.24	.21	.22	.24	.29	.50	.50
Mass.	93	100	4.52	.56	.41	.37	.33	.37	.42	.67	.67
R.I.	11	5	4.75	.70	.36	.43	.51	.40	.55	.65	.60
Conn.	48	60	4.65	.76	.42	.49	.37	.50	.51	.67	.63
N.Y.	338	490	4.06	.59	.41	.38	.45	.53	.69	.80	.91
N.J.	35	55	4.63	.64	.58	.58	.63	.59	.69	.70	.87
Pa.	207	400	4.55	.66	.54	.43	.49	.56	.72	.75	.90
Ohio	311	450	4.21	.67	.56	.54	.52	.84	.98	1.20	1.17
Ind.	342	430	4.07	.72	.53	.51	.55	1.02	1.35	1.77	1.56
Ill.	316	500	4.41	.69	.52	.46	.46	.38	1.15	1.40	1.40
Mich.	245	350	4.12	.57	.36	.37	.38	.43	.64	.93	1.00
Wis.	301	510	4.63	.55	.35	.31	.37	.44	.68	1.04	1.10
Minn.	201	375	4.56	.59	.34	.38	.41	.50	.73	1.28	1.24
Iowa	298	440	4.47	.72	.45	.45	.47	.71	1.10	1.31	1.32
Mo.	314	350	4.21	.53	.46	.49	.52	1.15	1.82	1.86	1.66
N.Dak.	183	320	4.91	.57	.45	.40	.45	.62	.87	1.55	1.70
S.Dak.	239	300	4.52	.79	.42	.44	.47	.74	1.12	1.74	1.66
Nebr.	261	350	4.43	.93	.55	.53	.60	1.21	1.92	2.00	1.92
Kans.	269	470	4.23	.95	.56	.46	.64	1.24	2.30	2.40	2.16
Del.	15	10	4.50	.60	.44	.39	.92	1.20	1.36	1.40	1.04
Md.	96	75	5.08	.93	.71	.69	.69	1.09	1.39	1.67	1.36
Va.	234	350	5.05	.90	.70	.69	.76	1.51	1.82	1.46	1.54
W.Va.	117	185	5.06	.53	.42	.53	.52	.92	1.04	.96	.96
N.C.	317	250	5.11	.76	.70	.72	.88	1.26	1.41	1.23	1.24
S.C.	163	200	5.27	.93	.80	.86	1.10	1.65	2.24	1.21	1.56
Ga.	277	230	5.26	.79	.71	.76	.85	1.84	2.04	1.33	1.29
Fla.	81	50	4.44	.70	.75	.77	.76	.92	1.17	.93	.94
Ky.	280	490	4.46	.72	.56	.59	.60	1.72	1.78	1.59	1.58
Tenn.	282	365	4.64	.65	.52	.62	.65	1.51	1.66	1.31	1.28
Ala.	275	300	4.90	.67	.56	.69	.80	1.75	1.57	1.26	1.10
Miss.	299	250	4.39	.72	.69	.69	.92	1.73	1.93	1.22	1.23
Ark.	250	310	4.50	.61	.51	.50	.65	1.26	1.55	1.17	1.01
La.	98	122	5.27	.88	.84	.82	1.00	1.55	1.72	1.22	1.46
Okla.	207	345	4.70	.73	.49	.61	.82	1.43	2.03	2.00	1.84
Tex.	438	680	4.54	.76	.65	.70	.95	1.56	2.09	1.35	1.44
Mont.	102	175	3.39	.71	.48	.49	.58	.74	1.28	1.39	1.74
Idaho	64	110	4.29	.61	.43	.53	.49	.66	1.28	1.57	1.20
Wyo.	92	95	3.31	.70	.54	.48	.58	.67	1.63	1.52	1.63
Colo.	93	200	4.31	.68	.56	.40	.49	.76	1.68	1.44	1.61
N.Mex.	53	88	4.59	.57	.55	.52	.55	.78	1.50	1.19	1.47
Ariz.	21	24	6.55	.43	.50	.57	.65	.53	1.12	.92	1.08
Utah	59	90	4.19	.40	.32	.28	.18	.35	.55	.72	.86
Nev.	20	15	4.25	.52	.42	.42	.63	.50	1.16	.88	1.39
Wash.	107	265	3.96	.66	.52	.45	.73	1.00	1.20	1.25	1.26
Oreg.	83	140	3.75	.73	.41	.43	.63	.85	1.16	1.33	1.14
Calif.	197	200	3.90	.67	.59	.59	.75	.75	.87	1.00	.81
U. S.	8,651	11,814	4.55	.712	.556	.589	.663	1.15	1.45	1.35	1.32

Table XXII.

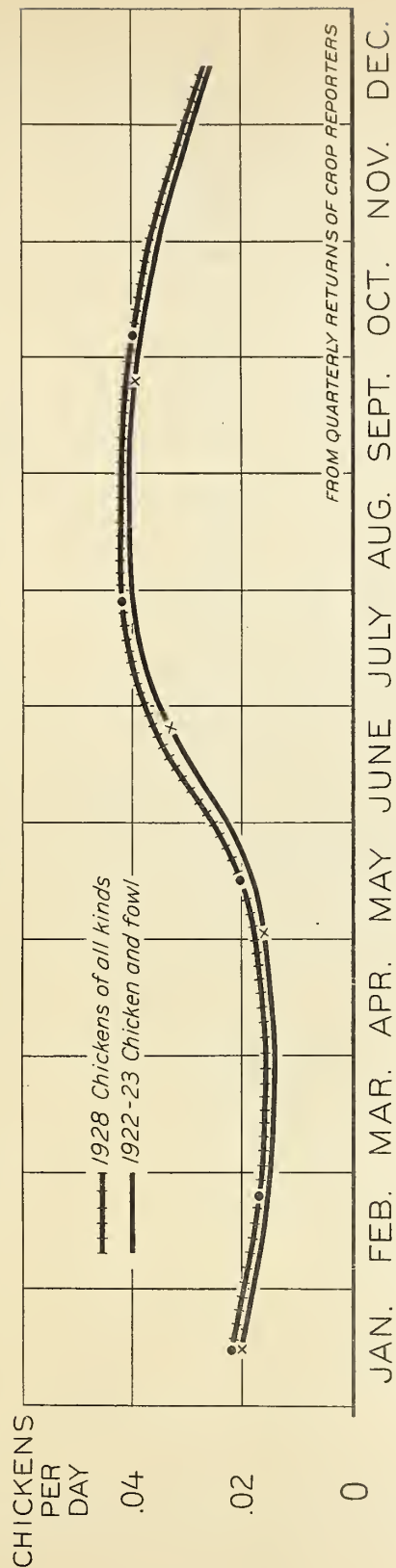
NUMBER OF CHICKENS CONSUMED DAILY ON FARMS, 1922-3  
and 1928, BY GEOGRAPHIC DIVISION.

(Daily average for each month, derived from  
curves of consumption based upon quarterly  
reports of crop correspondents.)

Month	New England		Middle Atlantic		North Central		West North Central	
	1922-3:1928		1922-3:1928		1922-3:1928		1922-3:1928	
Jan.	.017	.015	.020	.022	.021	.019	.023	.022
Feb.	.013	.012	.016	.018	.018	.016	.018	.017
Mar.	.012	.011	.014	.016	.016	.014	.015	.014
Apr.	.011	.011	.013	.016	.014	.014	.014	.013
May	.011	.010	.015	.017	.016	.015	.018	.018
June	.011	.010	.017	.020	.022	.021	.027	.026
July	.013	.012	.020	.024	.032	.030	.044	.041
Aug.	.017	.015	.023	.027	.039	.038	.056	.055
Sept.	.020	.018	.025	.029	.043	.041	.058	.057
Oct.	.022	.020	.026	.030	.042	.040	.053	.052
Nov.	.021	.019	.026	.030	.038	.035	.044	.043
Dec.	.020	.018	.024	.027	.029	.027	.033	.031
Year	.0157	.0143	.020	.023	.0276	.0259	.0337	.0325

Month	South Atlantic		South Central		Rocky Mountain		Pacific Coast	
	1922-3:1928		1922-3:1928		1922-3:1928		1922-3:1928	
Jan.	.020	.021	.019	.020	.021	.022	.022	.021
Feb.	.017	.018	.015	.017	.018	.019	.019	.019
Mar.	.016	.017	.014	.015	.013	.017	.017	.018
Apr.	.017	.018	.014	.015	.015	.016	.016	.020
May	.023	.024	.024	.026	.016	.018	.020	.024
June	.034	.033	.040	.042	.021	.026	.027	.029
July	.040	.043	.045	.047	.034	.040	.034	.033
Aug.	.040	.043	.043	.045	.045	.049	.038	.035
Sept.	.035	.038	.038	.040	.047	.050	.039	.035
Oct.	.031	.033	.033	.035	.044	.046	.038	.034
Nov.	.029	.030	.029	.031	.033	.038	.036	.032
Dec.	.026	.027	.024	.026	.027	.029	.029	.026
Year	.0274	.0291	.0263	.030	.0285	.0309	.0280	.0272

# CHICKEN CONSUMED DAILY PER PERSON ON FARMS IN UNITED STATES



# TREND OF INDEX FOR FARM PRICE OF CHICKENS AND MEAT ANIMALS

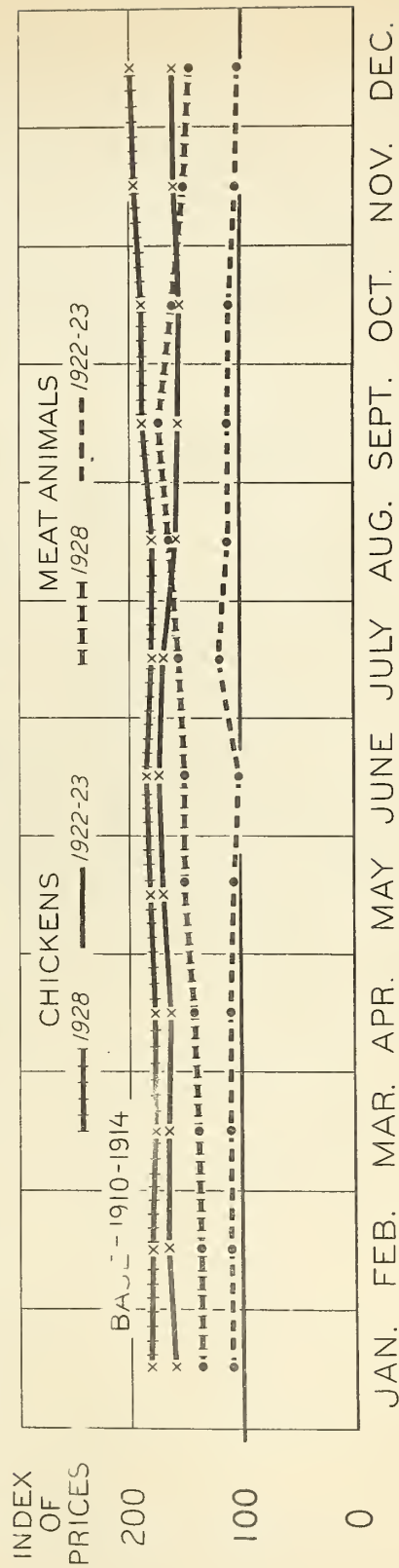


FIGURE 6



# CHICKENS CONSUMED PER CAPITA DAILY ON FARMS, 1922-23 AND 1928 DERIVED FROM QUARTERLY REPORTS OF CROP CORRESPONDENTS

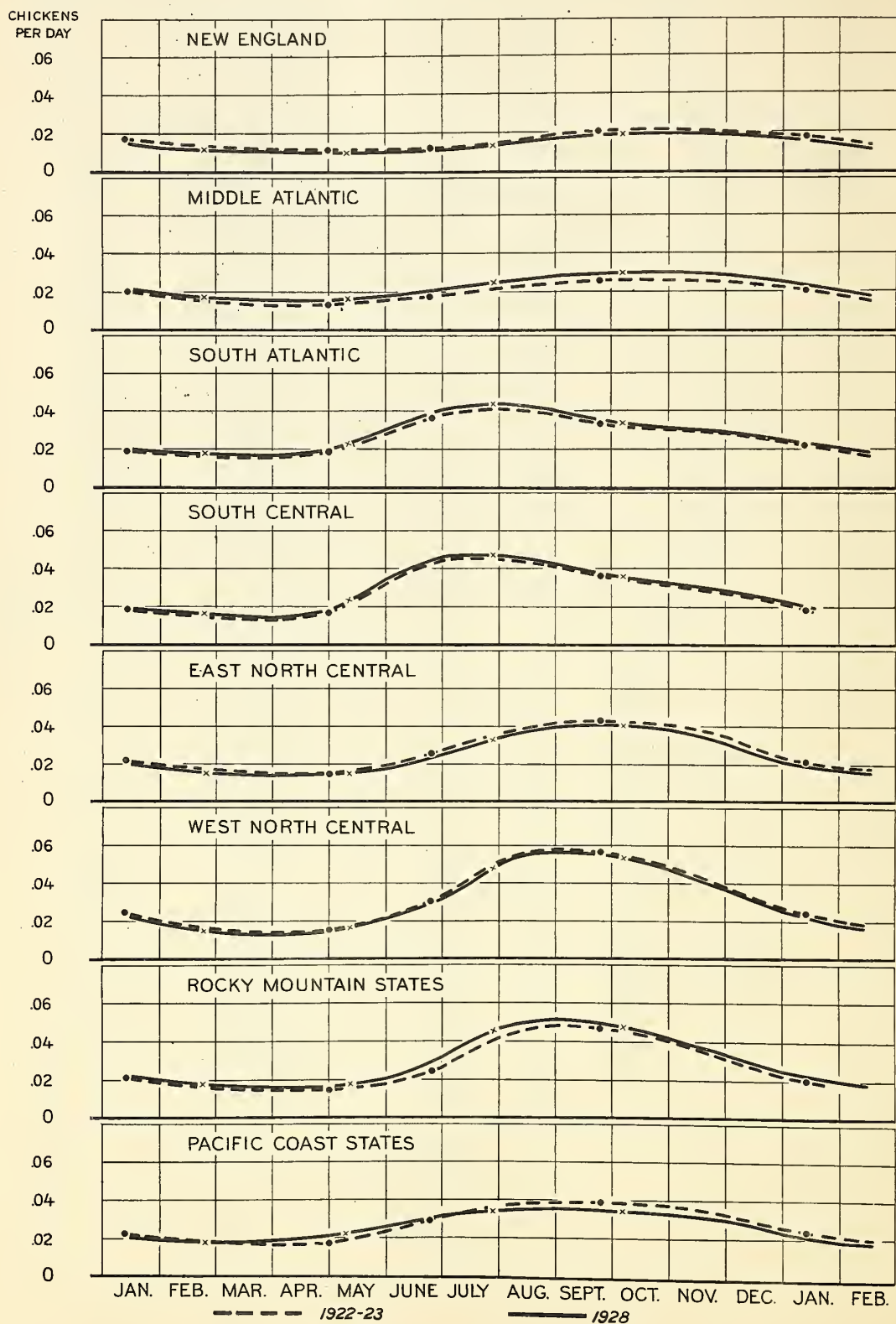
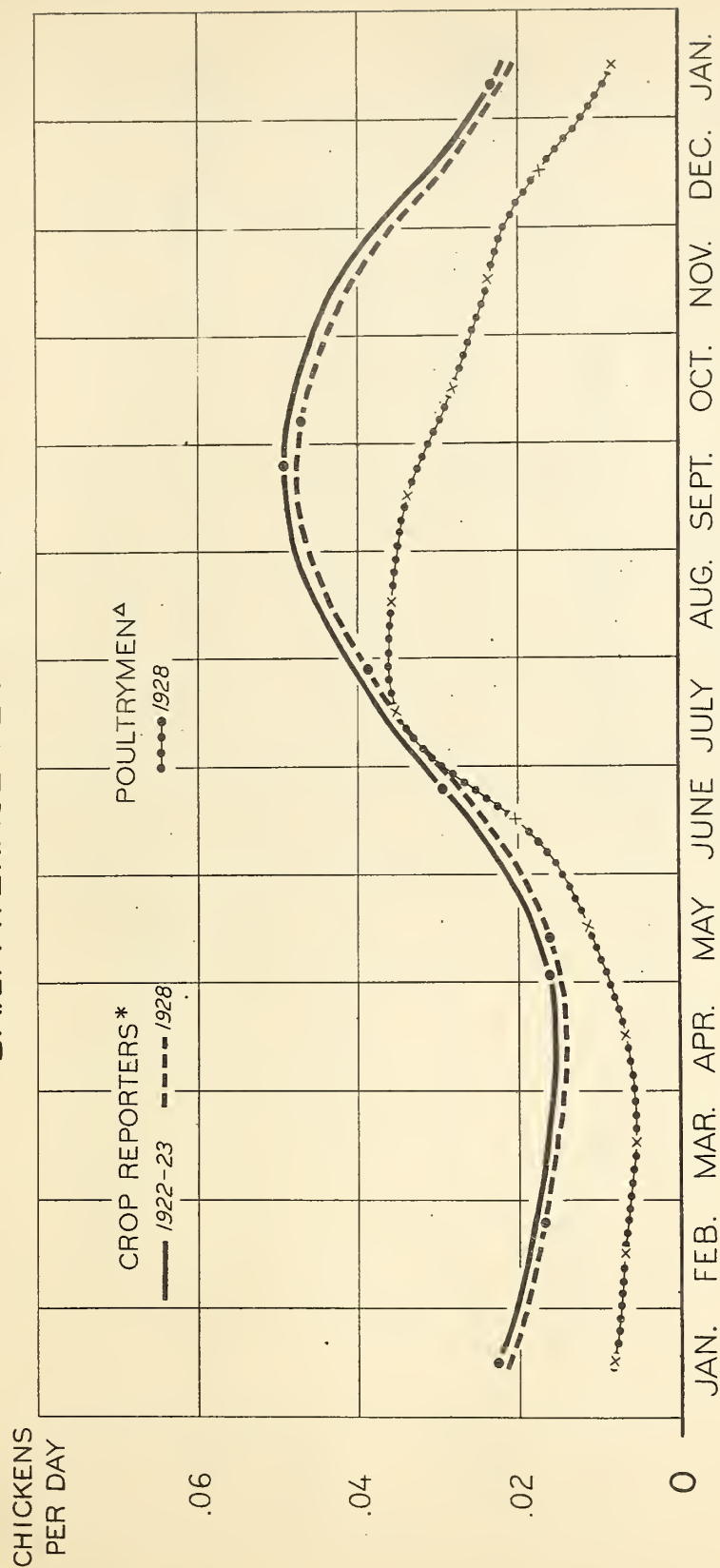


FIGURE 7



# CONSUMPTION OF CHICKENS ON ILLINOIS FARMS DAILY AVERAGE PER PERSON

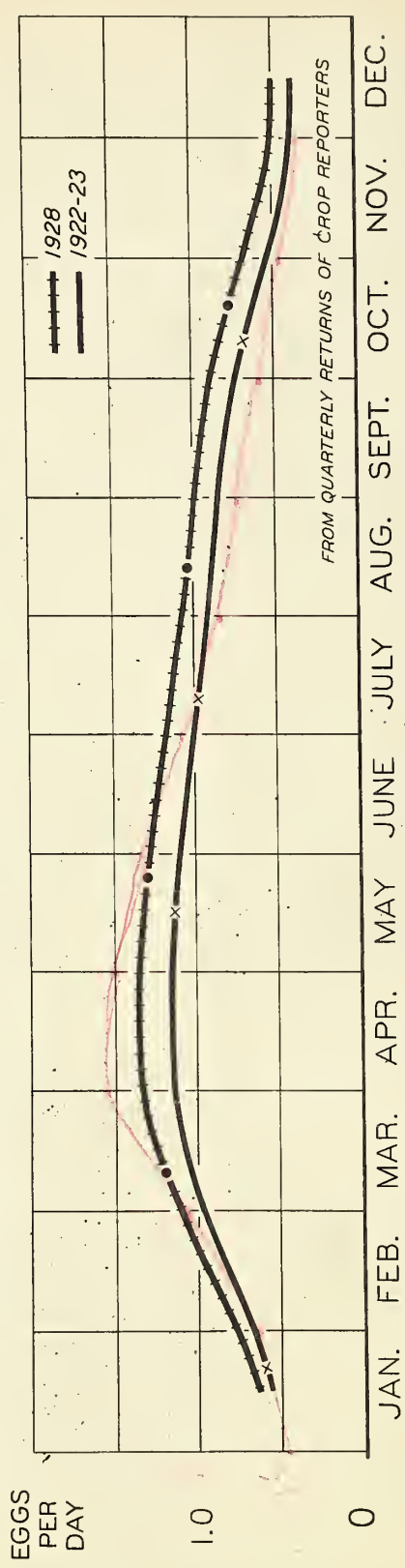


\* FROM QUARTERLY RETURNS OF CROP REPORTERS, 1922-23 AND 1928

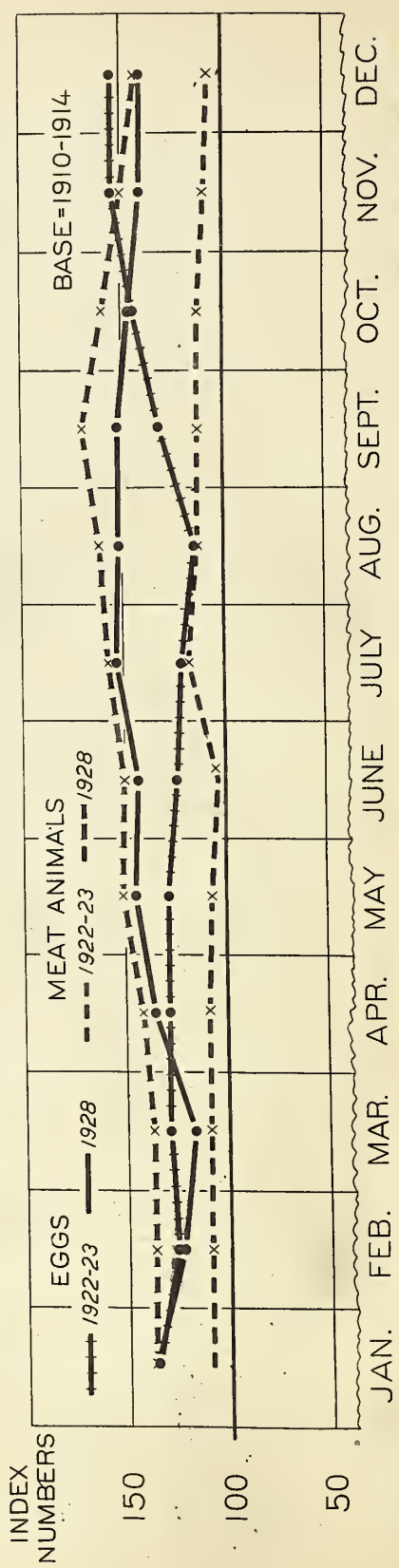
Δ MONTHLY RECORDS OF POULTRYMEN TO POULTRY DEPARTMENT OF ILLINOIS STATE UNIVERSITY, 1928

FIGURE 8

# EGGS CONSUMED DAILY PER PERSON ON FARMS IN THE UNITED STATES



# INDEX NUMBERS OF PRICES OF EGGS AND OF MEAT ANIMALS

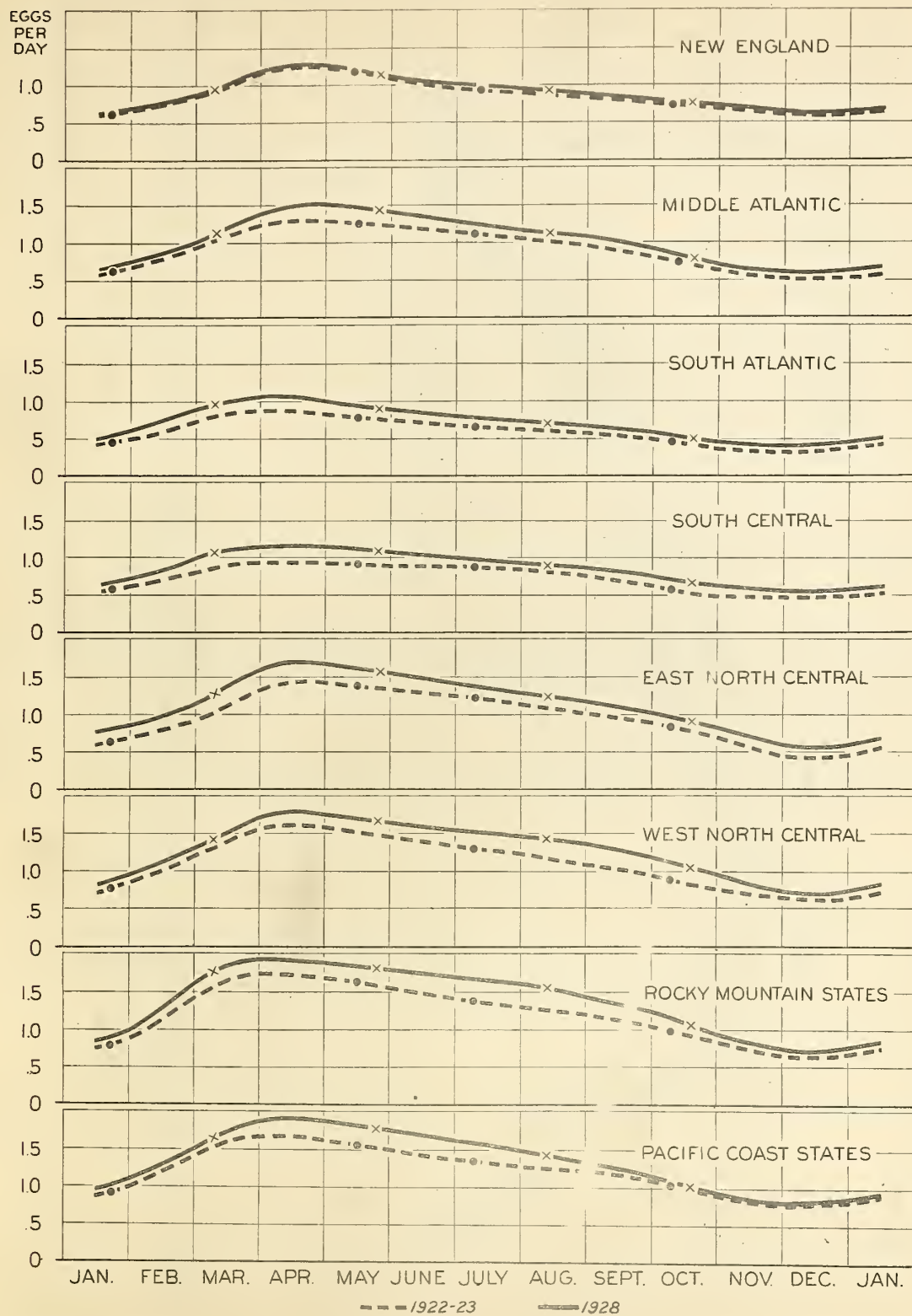


BUREAU OF AGRICULTURAL ECONOMICS

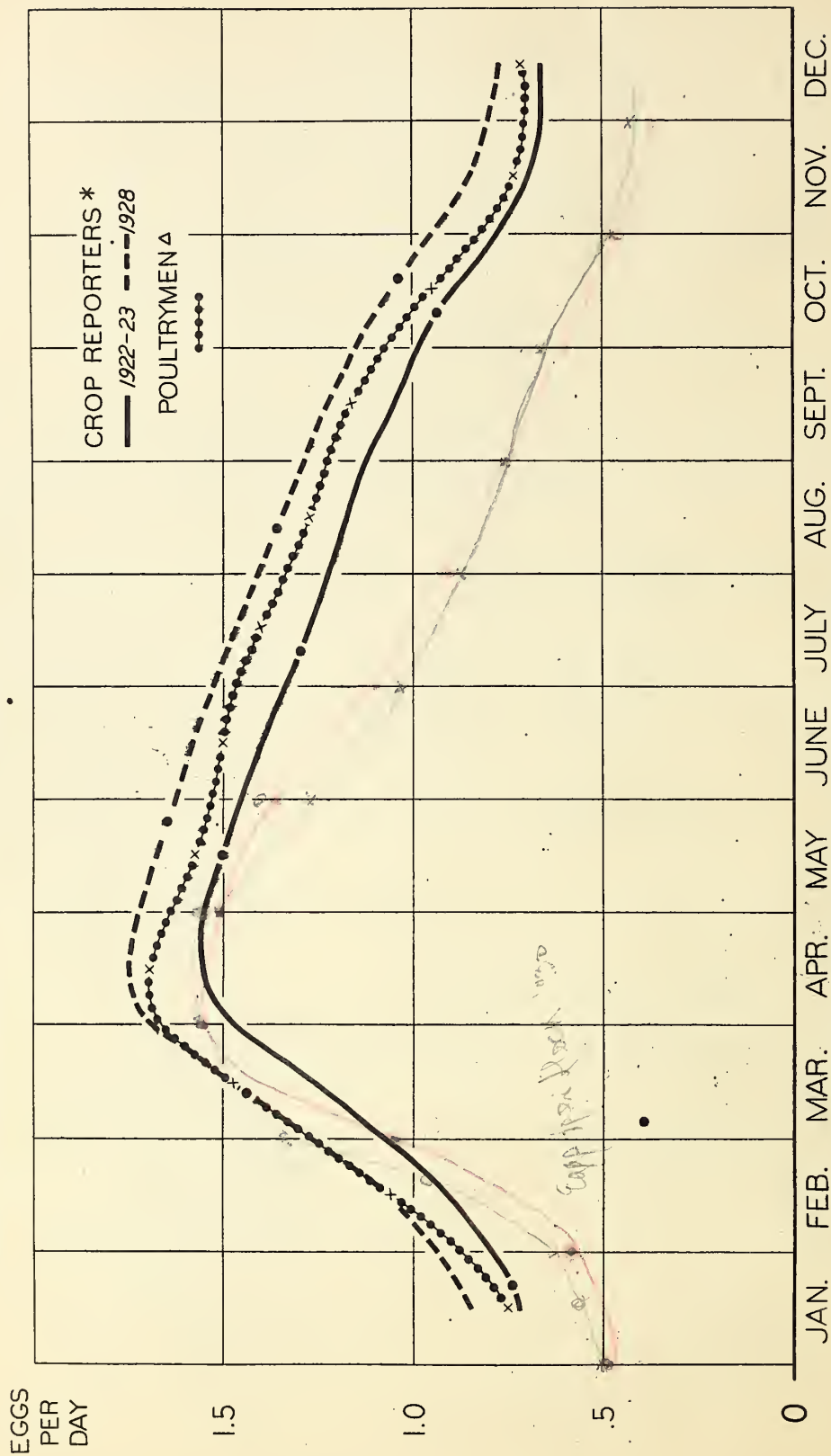
U.S. DEPARTMENT OF AGRICULTURE

FIGURE 9

# EGGS CONSUMED PER CAPITA DAILY ON FARMS, 1922-23 AND 1928 DERIVED FROM QUARTERLY REPORTS OF CROP CORRESPONDENTS



# EGGS CONSUMED PER PERSON DAILY ON ILLINOIS FARMS



\* FROM QUARTERLY RETURNS OF CROP REPORTERS, 1922-23 AND 1928

△ FROM MONTHLY RETURNS OF FARM FLOCKS TO POULTRY DEPARTMENT OF ILLINOIS STATE UNIVERSITY

U.S. DEPARTMENT OF AGRICULTURE

BUREAU OF AGRICULTURAL ECONOMICS

FIGURE 11



## Farm Consumption of Eggs

The quarterly inquiries made of crop reporters in 1922 and 1923 on the farm consumption of eggs, asked for "total number of eggs used in your household for eating and cooking during the week" and those in 1928 for "number of eggs used for eating and cooking during the last seven days." The difference in the language of the inquiry in the two series is probably immaterial, but the difference in dates makes comparison impossible between the two winter periods, as consumption is increasing rapidly between the two dates of January 22, when asked in 1923 and Mar. 10, when asked in 1928. Consumption in the spring and autumn periods of the two years is probably fairly comparable but for the summer much less so as the downward trend of consumption from July 10 to August 12 prevents accurate comparison. The reported consumption of eggs per person for the previous week, is shown in Table XXIII for grand divisions and for the U. S. with adjusted figures for the southern states and the U.S. to allow for the smaller consumption on average Census farms in the south which would be much lower than on the farms of crop reporters there. The weekly consumption reported for individual states appears in Table XXIIIa. The exaggeration in the Southern states must be remembered.

The spring consumption appears to have been decidedly heavier in 1928 than in 1923, and considering the declining trend of consumption during the summer, the slight increase shown in the August inquiry for 1928 over the July inquiry for 1922 suggests a correspondingly heavier summer consumption in the later year.

Seasonal trends of consumption for the two years are shown on figure 9 by a free-hand curve drawn through the plotted figures on consumption per person for 1922-23 and for 1928 separately. Farm price trends of eggs and of meat animals are shown on the same chart. Farm prices of eggs during the heavy laying period were from 10 to 15% higher in 1928 than in 1922-23 and averaged about 10% higher in the annual period covered by the later inquiry. Farm prices of all meat animals were about 40% higher in 1928 than in the earlier period. The greater consumption indicated in 1928, therefore, appears reasonable.

Figure 9 gives an approximate indication of monthly per capita farm consumption of eggs, as indicated by the height of the curve at the mid-month periods, and from these the average daily reported farm consumption per person may be deduced, which amounts to about .85 egg in 1922-23 and 1.01 in 1928. Figures on indicated consumption per person each month thus derived from the group of similar graphs for each grand division shown in figure 10, are shown in Table XXV.

Figure 11 shows curves drawn from the quarterly consumption figures of 1922-23 and 1928 for Illinois, together with a similar curve drawn from the 1928 returns of chicken farmers reporting monthly consumption of eggs to the state poultry extension service in that State.

The close agreement shown by the two separate sets of returns for 1922-23 and 1928 give confidence in the substantial accuracy of both. It is not known whether the consumption shown by the crop reporters runs higher than that on the average farm keeping chickens in that State. They represent a high class of farmers whose standard of living may be above that of the average farmer, but on the other hand, the number of persons per family is about the same as on the average farm and eggs are not a particularly expensive food on the farm at the time of year when consumption is highest.

Figure 12 shows daily production of eggs on Illinois farms indicated by layings on the first day of each month, as shown by the crop reporters, and indicated daily consumption as shown by flock owners reporting to the Poultry Division of the State University. It also displays a curve showing the price trend for eggs derived from the monthly farm prices for eggs by the formula  $\left( \frac{.1}{(\text{Price})} \times 3 \right)$  i.e.,

it shows the trend of the reciprocal of farm egg prices, trebled to show it in convenient relation to the production and consumption trends. To what extent the relation between the trend of consumption and the trends of production and its associated price reciprocal, respectively, is a true measure of the dependence of farm consumption upon supply and price, respectively, will require further evidence for an answer. Records of this character, coupled with studies of the important qualifying factors of supply and prices of other meats, should presently permit of the establishment of a reasonably close measure of the effect of farm supply and price upon farm consumption of eggs. The chart appears to support the logical assumption that consumption is more affected by production (available farm supply) at the season of small production and more by price at the season of large production. But one sample is hardly enough to justify safe deductions.

TABLE XXIII. EGGS CONSUMED PER PERSON, ON U. S. FARMS,  
DURING PREVIOUS WEEK, IN EACH GEOGRAPHIC DIVISION.  
1922-3 and 1928.

(From quarterly reports of Crop Correspondents)

Geographic division	Consumption of eggs reported per person for previous week. (Date shows when inquiry was mailed out).							
	1-22-23	3-10-23	5-14-23	5-25-28	7-10-22	8-12-28	10-10-22	10-19-28
New England	4.47	6.72	8.18	7.90	6.61	6.59	5.11	5.34
Middle Atlantic	4.40	8.10	8.30	10.10	7.78	7.96	5.18	5.30
East North Central	4.43	8.81	9.64	10.82	8.49	8.67	5.65	6.30
West North Central	5.45	10.00	10.15	11.51	9.00	9.90	6.19	7.29
South Atlantic	4.25	9.06	7.05	8.35	5.98	6.50	4.34	4.55
South Atlantic Adjusted	3.26	6.94	5.40	6.40	4.58	4.98	3.32	3.48
South Central	5.06	9.59	8.17	9.62	7.10	7.09	5.26	6.06
South Central Adjusted	3.93	7.44	6.34	7.46	5.52	5.51	4.03	4.71
Rocky Mountain	5.44	12.30	11.43	12.55	9.71	10.69	6.96	7.39
Pacific	6.60	11.66	10.99	12.56	9.29	10.04	7.46	7.24
U. S.	4.87	9.42	8.77	10.08	7.63	7.99	5.42	6.04
U. S. Adjusted	4.32	8.32	7.86	9.02	6.85	7.15	4.86	5.40

Tablo XXIIIa

EGGS CONSUMED WEEKLY PER PERSON ON U. S. FARMS.  
AS REPORTED BY CROP CORRESPONDENTS. QUARTERLY  
1922-3 and 1928.

(See Table XXI for average number of farms reporting and average number of persons per farm.)

State	Weekly egg consumption reported per person (Date of inquiry shows at head of each column.)							
	1-22-23:3-10-28		5-14-23:5-25-23		7-10-22:8-12-28		10-10-22: 10-19-28	
	Number	Number	Number	Number	Number	Number	Number	Number
Mo.	3.8	6.1	8.1	8.4	6.5	6.6	4.8	5.4
N.H.	4.5	7.4	8.0	7.8	6.9	6.8	4.3	4.5
Vt.	3.3	5.3	7.7	7.6	6.5	6.0	4.3	3.9
Mass.	5.5	7.9	8.1	7.6	6.4	6.7	5.4	6.2
R. I.	5.6	8.4	8.0	7.6	6.5	7.0	5.5	6.3
Conn.	5.1	6.9	9.0	7.9	7.0	6.8	6.4	5.9
N. Y.	4.9	8.8	8.8	11.0	8.5	8.9	5.6	5.7
N. J.	5.2	7.8	8.8	9.4	9.3	9.5	5.5	5.9
Pa.	3.9	7.6	8.8	9.5	7.0	7.0	4.8	4.9
Ohio	4.6	8.8	8.9	10.4	8.9	8.0	5.7	5.8
Ind.	4.6	8.4	9.5	10.7	7.9	8.4	5.5	6.3
Ill.	5.3	10.1	10.5	11.5	9.1	9.5	6.5	7.3
Mich.	3.7	7.9	9.9	11.0	8.2	9.2	5.2	6.1
Wis.	3.7	8.5	9.4	10.5	8.1	8.3	5.1	5.9
Minn.	3.8	8.6	9.5	10.5	7.9	8.4	5.2	5.9
Iowa	6.0	9.9	9.8	12.1	9.5	9.8	6.0	7.9
Mo.	5.2	9.3	9.3	10.5	8.7	8.5	6.0	6.5
N. Dak.	3.7	10.7	12.5	12.2	10.2	11.1	6.4	7.5
S. Dak.	5.9	10.9	10.2	11.8	10.8	11.4	7.0	7.4
Nebr.	6.7	13.6	10.3	12.0	10.6	10.6	6.4	7.3
Kans.	6.7	11.5	11.4	12.6	11.2	11.9	7.3	9.2
Del.	4.7	8.4	8.6	8.1	7.5	7.5	7.0	7.1
Md.	4.1	8.2	7.9	7.3	6.7	7.3	5.1	4.0
Va.	4.1	8.8	7.1	8.6	5.8	6.3	4.3	4.9
W.Va.	4.2	7.9	8.4	8.7	6.7	7.0	4.2	4.2
N.C.	3.9	9.1	6.7	8.1	5.6	6.0	4.1	4.6
S.C.	4.2	8.2	6.2	8.4	5.5	7.0	4.1	3.9
Ga.	4.4	10.0	6.8	8.2	6.1	6.2	4.4	4.6
Fla.	5.8	11.4	9.7	9.4	7.6	8.2	5.5	5.6
Ky.	4.0	7.8	8.0	8.8	6.6	6.0	4.2	4.5
Tenn.	3.9	8.0	7.1	8.4	6.2	6.3	4.2	4.5
Ala.	4.5	8.6	7.6	8.9	5.9	6.3	4.6	5.1
Miss.	4.8	9.0	7.8	8.6	6.2	6.7	4.7	5.1
Ark.	4.8	9.8	8.7	10.0	7.0	6.6	4.8	6.1
La.	5.7	10.5	8.0	9.7	7.7	6.8	5.3	6.5
Okla.	6.5	10.8	9.3	11.1	9.5	8.6	6.8	8.0
Tex.	6.1	11.5	8.7	10.9	7.8	8.5	6.7	7.9
Mont.	5.4	13.0	14.2	14.1	12.1	12.2	8.8	8.7
Idaho	5.2	12.5	10.6	12.3	8.8	10.1	6.6	7.0
Wyo.	6.7	13.1	12.4	13.3	10.7	12.4	8.5	8.8
Colo.	5.8	12.5	11.5	12.7	11.0	11.9	7.2	7.2
N.Mex.	5.1	12.4	10.6	12.5	7.2	8.0	5.5	6.6
Ariz.	5.4	10.5	11.3	12.0	8.6	10.5	5.8	7.4
Utah	4.5	10.6	8.2	9.6	7.0	8.3	5.2	6.1
Nev.	7.0	13.3	11.8	14.1	9.0	11.0	7.5	8.8
Wash.	6.0	12.2	10.8	14.0	10.0	10.2	6.9	8.0
Oreg.	6.4	12.7	10.2	13.4	8.7	10.3	7.5	6.5
Calif.	7.1	10.8	11.5	11.2	9.1	9.8	7.8	7.1
U. S.	48.7	94.2	8.77	10.08	76.3	72.00	54.2	60.1



TABLE XXIV.

Number of Eggs Consumed Daily Per Capita on Farms (Daily Average for each Month, 1922-1923 and 1928, By Geographic Divisions.)

Month:	:New England :		:Middle Atlantic:		:East North :		: West North :	
	:		: Central :		: Central :		:	
	:1922-3:	1928:	1922-3:	1928	:1922-3:	1928:	1922-3:	1928 :
	:P.ct.	:P.ct.:	P.ct.:	P.ct.	:P.ct.	:P.ct.:	P.ct.:	P.ct. :
January	:0.62	0.64	0.60	0.67	0.60	0.76	0.72	0.84 :
February	:0.73	0.77	0.80	0.88	0.80	0.99	1.00	1.11 :
March	:1.00	1.03	1.10	1.34	1.13	1.39	1.38	1.51 :
April	:1.22	1.27	1.28	1.49	1.42	1.68	1.59	1.75 :
May	:1.15	1.20	1.26	1.47	1.37	1.60	1.51	1.67 :
June	:1.00	1.05	1.18	1.34	1.28	1.47	1.38	1.57 :
July	:0.92	0.98	1.09	1.22	1.19	1.35	1.27	1.50 :
August	:0.85	0.91	1.00	1.12	1.08	1.22	1.15	1.40 :
September	:0.78	0.85	0.89	0.99	0.95	1.08	1.02	1.27 :
October	:0.71	0.78	0.71	0.81	0.78	0.91	0.85	1.06 :
November	:0.63	0.63	0.56	0.65	0.55	0.70	0.67	0.83 :
December	:0.57	0.62	0.52	0.60	0.46	0.61	0.62	0.72 :
Year	:0.85	0.90	0.92	1.05	0.97	1.15	1.10	1.27 :

Month	:South Atlantic:		:South Central:		: Rocky Mountain:		: Pacific :	
	:		:		:		:	
	:1922-3:	1928 :	:1922-3:	1928 :	:1922-3 :	1928 :	:1922-3:	1928 :
	:P.ct.	:P.ct.:	P.ct.:	P.ct.:	:P.ct.	:P.ct.:	P.ct.:	P.ct. :
January	: 0.44	0.51	0.53	0.65	0.74	0.87	0.89	0.99 :
February	: 0.61	0.75	0.70	0.86	1.13	1.28	1.20	1.30 :
March	: 0.82	1.01	0.90	1.09	1.62	1.82	1.57	1.71 :
April	: 0.85	1.05	0.95	1.15	1.72	1.91	1.66	1.89 :
May	: 0.77	0.95	0.92	1.10	1.62	1.82	1.55	1.82 :
June	: 0.69	0.85	0.90	1.02	1.47	1.73	1.42	1.69 :
July	: 0.65	0.78	0.87	0.96	1.36	1.64	1.32	1.56 :
August	: 0.60	0.71	0.80	0.88	1.25	1.52	1.25	1.41 :
September	: 0.54	0.63	0.69	0.80	1.12	1.34	1.16	1.24 :
October	: 0.44	0.51	0.55	0.63	0.93	1.10	1.01	1.05 :
November	: 0.35	0.42	0.47	0.57	0.72	0.83	0.85	0.88 :
December	: 0.35	0.42	0.47	0.56	0.69	0.74	0.81	0.84 :
Year	: 0.59	0.72	0.73	0.86	1.20	1.38	1.22	1.36 :

This table permits comparisons between regions. The relative exaggeration of reported consumption in southern states due to the difference between farmers reporting to the Department of Agriculture and the average farmer as defined in the Census returns must be allowed for in making comparisons between the figures for those states and for other sections.

## PRICES OF EGGS

The Division of Crop and Livestock Estimates obtains monthly from an extensive list of producers and local dealers reports on the farm price of eggs. These figures weighted by receipts at Chicago show for the year 1919 an average figure for the United States of 39.9¢ as contrasted with 40¢ shown by the Census returns for the same period. Similarly, for 1910, the first year for which these monthly figures are available, the average is 20.5¢ per dozen, while the Census average for the year 1909 was 20¢. The price range for those two years, according to such checks as are available were about the same. The New York average yearly prices for nearby henmy white eggs, which is equivalent to the present classification of nearby henmy whites, shows 33.8 and 35.0¢.

The Census of 1924 made use of valuation figures on eggs supplied by the Division of Crop and Livestock Estimates and based upon an inquiry sent to its regular crop correspondents under date of March 20, 1925. The figures thus obtained were evidently too high to fairly represent the price during 1924. The inquiry was made following a five-month period during which prices for eggs were considerably higher than the yearly average, and higher than for a number of years and it can hardly be doubted that the answers of reporters to the inquiry were seriously affected by the high range of prices then prevailing. The five-months average from November 1, 1924 to March, 1925 was 70% higher than the yearly average from April 1924 to March, 1925, while that for the similar five months, 1919-20 was only 32% higher than the 12-months' period.

Under the circumstances, and the excellent basis for an annual figure found in the monthly price reports, it seems advisable to base valuation figures for eggs entirely upon the weighted yearly average of the monthly returns.

## PRICES OF CHICKENS

Three main sources of information on values of chickens are available; the Census accepted valuations January 1, 1925 and 1920; the annual January 1 reports of the Division of Crop and Livestock Estimates, and the monthly price reports on farm price per pound of chickens.

### Census Prices

The 1925 Census figure of 92.6 cents per head for chickens is based upon price data furnished by the crop correspondents of the Division of Crop and Livestock Estimates in response to a special price inquiry dated March 20, 1925, asking under the general head of -

"AVERAGE FARM PRICE (OR VALUE) OF ENTIRE 1924 PRODUCTION",

for "chickens on hand, inventory value of all chickens on hand January 1, 1925, per head".





make up about 85% of all chickens and 82% of all poultry this would necessitate a price of about 33¢ for "other chickens" and nearer 30¢ for "other poultry" to be consistent with the figure given in the original inquiry for "poultry", but such figures would be impossible.

If the reported values of hens and pullets were accepted as substantially correct and the value of other chickens taken at an assumed value per head of about three-fourths that of hens and pullets, the resulting computed value for all chickens would be about 8% higher than the value reported for all "poultry". Such an increase would make a January 1 price of 85¢ for poultry and 82¢ for chicken, instead of the reported price of 78.7¢ for poultry and equivalent price of 76.3 ¢ for chickens.

The January 1 price reported per head for "poultry" is probably largely dependent upon the prices for birds being sold for meat. The price per head for "hens and pullets of laying age", reported on a separate January schedule, seems more likely to represent their value as layers. Such a concept of value is proper for birds held on January 1 for layers, if it reflects the local average, but it seems likely that the price reported would be based to a considerable extent upon the value of the layers in the reporters' own flocks, which we may assume are superior to those in average laying flocks.

Adjusting the reported Census value per head of "poultry" sold in 1920 to an indicated value for the same type of birds in recent years, by changing the Census values per head in the same proportion that prices per pound for "chickens" changed in the intervening years, and comparing this indicated value of poultry per head (Census base) with the value per head reported by correspondents in these years, a fairly good agreement is found. Taking the average for the country as a whole, a similar adjustment of Census prices for "chickens" gives derived Census figures a couple of cents lower on the average than the reported annual prices for "poultry". The relation varies somewhat between states but considering the varying influences of a larger or smaller proportion of other poultry, especially turkeys, in the different states, and the faults of limited returns for some states, the detailed relations are fairly satisfactory. From this relationship one would deduce that the reported annual price per head of "poultry" would need to be reduced slightly to make it applicable to "chickens".

The farm prices per pound of chickens reported monthly by correspondents and continued unchanged since 1909 no doubt reflect the average price being paid for chickens marketed from the locality.

Therefore, as an alternative it would be possible to go back to the Census values of 1919-20 for a base price per head and carry this forward on the basis of the trends shown by these monthly reports. As indicated above, this would tend to put the price on practically the basis of the January 1, 1925 annual inquiry on value per head of "poultry". A comparison of the indicated prices for poultry, chickens, and hens and pullets of laying age, respectively, as drawn from the various sources mentioned, is shown for 1927, 1928, and 1929 in Table XXV following.

RELATIVE VALUE PER HEAD OF POULTRY.

Table XXV.

Comparison of Poultry Values, derived from Different Sources.

Source of Figures	Type of bird	Indicated price January 1,		
		1927	1928	1929
A. Computed from ratio of January 1 (December 15 preceding) reported farm price of year stated to that of 1920, times 1920 Census value per head of poultry	Poultry	Cents 90	Cents 87	Cents 96
B. Computed from ratio of farm price for year stated to that of 1920, times 1920 Census value per head of chickens.	Chickens	87	84	93
C. As reported currently by crop correspondents on January 1 schedule of inquiry	Poultry	91	86	92
D. As reported currently by crop correspondents on January 1 schedule of inquiry	Hens and Pullets of Laying Age	100	96	102

The stated values are probably faulty in the following respects:

"C" is probably low because based on meat values rather than on egg-laying value, which would be the most important gauge of value at that date, but this is partially offset because the price relates to "poultry" rather than to chickens.

"D" may be too high because of the superior type of birds in reporters' flocks, and would be too high in any event for all chickens. Relatively low figure in January, 1929, may be due to the temporarily very low price of eggs at that date.

From the preceding it seems reasonable, as well as convenient, to accept for the present the correspondent's reported annual January 1 price for all poultry as a conservative basic figure for all "chickens", to be checked and adjusted when necessary by the aid of the price trends for "hens and pullets" and the trends shown by the monthly farm prices per pound for chickens.

The price for chickens raised, sold and consumed on farms is based upon the reported average monthly farm price (weighted by monthly marketings) times an assumed average weight of bird. The weight per bird is derived from the 1920 Census value per head of chickens sold, in 1919, divided by the weighted 1919 price per pound of chickens sold.

## P A R T    I I

### ESTIMATES OF POULTRY AND EGGS

The tabular statements appearing in Part II are the estimates of the Division of Crop and Livestock Estimates. The estimates are based upon study of the Census figures and of the evidence drawn from records of commercial movement, from various surveys and from the reports of the Crop Correspondents of the Department regarding their own flocks. The estimates are believed to be conservative. The evidence from other sources than the Census would support much higher figures than taken but it was considered unwise to make any greater increase over the Census on the basis of evidence at present available. No claim is made for close accuracy in the absolute figures given, other than that they reflect more adequately than do the Census figures the magnitude of the industry. The relation of the figures for successive years, however, is believed to be reasonably accurate, so that they afford a fair picture of the changes and development of the industry during the past ten years and particularly during the past five. Each table is accompanied by detailed notes, giving the basis for the figures for successive years.

Table XXVI. Number and Value of Chickens on Farms, January 1, 1920-1929  
By Geographic Divisions.

- 1920 - Numbers as reported by U. S. Census from enumerations as of January 1 that year.
- 1921-24 Numbers estimated from changes on farms of crop reporters of U. S. Department of Agriculture as shown in January 1 reports of livestock, including poultry, on reporters' own farms.
- 1925 Numbers estimated from reported Census enumerations, with slight adjustments in different states to allow for apparent incompleteness in the enumerations.
- 1926-29 Numbers estimated from changes on farms of crop reporters as shown in January 1 reports of numbers of poultry on reporters' own farms, changes shown in monthly reports of numbers of hens and pullets in farm flock on first day of each month, and on changes in numbers of poultry shown for a limited number of commercial poultry flocks.
- 1920 Values as reported by U. S. Census, price derived.
- 1921-29 Price per head of poultry as reported annually on January 1 by crop reporters, checked and adjusted by reported prices for hens and pullets, and by the trends shown by the reported monthly farm price per pound for chickens. Total value is number multiplied by price per head.



Table XXVI.

ESTIMATED NUMBER AND VALUE OF CHICKENS ON FARMIS  
JANUARY 1, 1920 - 1929  
BY  
GEOGRAPHIC DIVISIONS

Geographic division and year	Chickens on hand January 1		
	Number of birds	Value per head	Total value
	Thousands	Cents	Thousand dollars
North Atlantic:			
1920 (Census)	33,256	138.28	45,986
1921	33,580	133.72	44,914
1922	39,906	117.12	46,738
1923	42,899	112.56	48,287
1924	46,586	116.09	54,030
1925	44,077	118.16	52,046
1926	44,817	126.45	56,669
1927	46,164	125.12	57,760
1928	47,711	122.80	58,587
1929	46,240	129.27	59,776
East North Central:			
1920 (Census)	84,516	96.02	81,154
1921	80,260	88.05	70,669
1922	88,709	79.12	70,137
1923	95,467	73.36	70,035
1924	98,949	79.02	78,190
1925	91,289	85.33	77,901
1926	93,932	95.42	89,628
1927	98,775	96.30	95,125
1928	99,129	90.83	90,037
1929	96,634	98.36	95,054
West North Central:			
1920 (Census)	105,348	89.51	94,293
1921	108,559	81.45	88,421
1922	114,883	75.81	87,093
1923	121,206	64.89	78,651
1924	132,537	66.37	87,995
1925	124,475	68.39	85,123
1926	126,193	80.05	101,012
1927	129,947	83.94	109,076
1928	130,628	79.14	103,377
1929	129,693	86.53	112,229
South Atlantic:			
1920 (Census)	36,408	96.94	35,292
1921	37,492	86.96	32,603
1922	40,405	75.61	30,550
1923	41,132	77.55	31,898
1924	45,732	80.37	36,757
1925	42,271	81.95	34,641
1926	42,095	88.10	37,085
1927	45,023	89.02	40,081
1928	47,722	84.50	40,323
1929	42,583	86.96	37,030

Table XXVI.

ESTIMATED NUMBER AND VALUE OF CHICKENS ON FARMS  
JANUARY 1, 1920 - 1929  
BY  
GEOGRAPHIC DIVISIONS - Continued.

Geographic division and year	Chickens on hand January 1		
	Number of birds	Value per head	Total value
	Thousands	Cents	Thousand dollars
South Central:			
1920 (Census)	74,011	84.32	62,777
1921	70,275	75.32	52,931
1922	80,631	66.24	53,410
1923	76,193	61.56	46,920
1924	83,492	61.77	54,662
1925	81,006	65.26	52,916
1926	81,155	71.29	57,858
1927	99,125	67.18	66,592
1928	93,801	70.45	66,035
1929	87,434	73.33	64,161
Far Western:			
1920 (Census)	25,999	115.41	30,005
1921	25,994	103.95	28,320
1922	31,973	100.29	32,066
1923	34,572	88.75	30,683
1924	36,842	81.65	30,081
1925	34,557	81.73	28,244
1926	36,035	93.38	33,648
1927	39,631	100.89	39,935
1928	44,373	91.11	40,429
1929	41,897	94.73	39,690
United States:			
1920 (Census)	359,537	97.21	349,509
1921	356,168	89.30	318,058
1922	396,507	80.77	320,259
1923	411,469	74.61	306,998
1924	449,188	76.09	341,765
1925	417,755	75.20	330,071
1926	424,227	83.61	375,900
1927	448,665	91.07	408,619
1928	463,364	86.07	398,838
1929	444,481	91.30	405,798

ESTIMATED NUMBER AND VALUE OF ALL CHICKENS  
ON FARMS ON JANUARY 1, 1924 - 1929.

By States

State	Number of chickens January 1 (thousands)					
	1924	1925	1926	1927	1928	1929
Me.	2,127	1,957	1,957	1,398	2,020	1,908
N.H.	1,293	1,267	1,267	1,242	1,336	1,271
Vt.	1,054	970	970	999	1,040	973
Mass.	2,071	2,030	2,030	1,949	2,027	1,991
R.I.	361	361	361	333	412	391
Conn.	1,752	1,590	1,784	1,320	1,961	2,059
N.Y.	14,035	13,945	13,945	14,224	14,366	13,980
N.J.	4,512	4,196	4,322	4,533	4,674	4,628
Pa.	18,531	17,652	18,161	19,111	19,375	19,034
Ohio	22,707	21,345	22,643	23,549	23,807	23,185
Ind.	19,462	17,710	17,356	18,310	17,821	17,331
Ill.	28,566	25,995	26,514	27,575	27,479	27,148
Mich.	14,003	12,956	13,605	14,422	15,143	14,503
Wis.	14,131	13,203	13,314	14,919	14,799	14,467
Minn.	17,433	16,736	17,087	17,276	16,789	17,411
Iowa	32,554	30,275	31,183	31,806	32,340	32,005
Mo.	31,904	28,766	29,937	31,733	31,733	30,603
N.D.	5,500	5,233	5,442	5,263	5,158	5,322
S.D.	8,405	7,985	8,065	8,226	8,449	8,472
Nebr.	14,203	13,635	13,090	13,613	13,787	13,471
Kans.	22,500	21,825	21,309	22,030	22,372	22,409
Del.	1,547	1,392	1,392	1,434	1,462	1,389
Id.	4,004	4,324	4,454	4,721	4,762	4,511
Va.	10,451	9,406	9,594	10,361	10,396	9,879
W.Va.	4,929	4,436	4,436	4,569	4,747	4,643
N.C.	9,570	8,900	8,900	9,345	10,116	9,675
S.C.	4,644	4,365	4,103	4,513	4,827	4,133
Ga.	7,478	7,254	7,066	7,632	8,245	7,054
Fla.	2,309	2,194	2,150	2,448	2,667	2,294
Ky.	12,508	11,257	11,433	12,401	12,539	11,063
Tenn.	13,425	12,217	12,534	13,339	14,156	12,712
Ala.	7,192	6,473	6,473	6,362	7,090	6,237
Miss.	6,017	6,135	6,503	7,023	7,171	6,534
Ark.	8,543	7,522	7,398	8,530	8,371	8,401
La.	4,514	4,063	4,063	4,724	4,289	4,307
Okla.	13,836	13,283	13,626	15,107	15,561	15,457
Tex.	21,552	20,136	19,525	21,139	24,124	22,673
Mont.	2,797	2,545	2,596	2,466	2,676	2,863
Idaho	2,200	2,090	2,194	2,414	2,562	2,723
Wyo.	399	809	793	823	953	930
Colo.	4,070	3,752	3,902	4,214	4,208	4,502
N.Mex.	1,072	965	933	977	1,119	1,101
Ariz.	595	655	720	864	735	676
Utah	1,436	1,436	1,405	1,642	1,806	1,940
Nev.	260	234	251	271	233	236
Wash.	5,691	5,577	6,134	7,054	8,313	7,572
Oreg.	3,501	3,326	3,326	3,692	4,291	4,049
Calif.	14,313	13,168	13,826	15,209	17,342	15,250
U.S.	449,183	417,755	424,227	448,665	463,364	444,481



ESTIMATED NUMBER AND VALUE OF ALL CHICKENS  
ON FARM ON JANUARY 1, 1924 - 1929.

By States

State	Value of chickens per head January 1.					
	1924 cts.	1925 cts.	1926 cts.	1927 cts.	1928 cts.	1929 cts.
Me.	125	125	132	132	136	140
N.H.	145	140	148	153	150	150
Vt.	122	122	130	132	130	130
Mass.	160	150	165	155	160	160
R.I.	165	160	170	160	160	157
Conn.	145	145	155	150	155	155
N.Y.	114	112	121	120	117	123
N.J.	140	140	149	146	130	145
Pa.	100	108	115	115	114	121
Ohio	85	89	100	100	93	97
Ind.	75	82	94	95	89	95
Ill.	80	85	96	96	91	101
Mich.	81	90	96	98	92	103
Wis.	71	80	83	81	88	95
Minn.	60	70	77	80	73	79
Iowa	73	70	89	90	84	90
Mo.	72	70	81	85	85	83
N.D.	54	58	70	71	70	77
S.D.	65	62	73	82	74	83
Nebr.	62	58	74	80	75	84
Kans.	60	63	77	83	75	81
Del.	100	100	115	120	105	109
Md.	93	95	113	112	100	104
Va.	83	83	90	92	91	95
W.Va.	82	83	95	92	90	92
N.C.	77	78	80	81	81	82
S.C.	73	73	73	78	73	72
Ga.	70	75	74	76	71	72
Fla.	88	95	105	100	85	87
Ky.	65	69	74	80	77	82
Tenn.	63	68	73	77	73	75
Ala.	65	65	67	70	67	70
Miss.	69	70	70	71	70	72
Ark.	58	58	67	67	62	68
La.	76	67	77	76	77	81
Okla.	56	63	74	80	73	78
Tex.	58	64	69	72	67	67
Mont.	62	70	71	80	83	84
Idaho	56	61	70	75	73	79
Wyo.	62	70	73	80	80	82
Colo.	66	67	73	73	74	75
N.Mex.	67	68	75	81	74	76
Ariz.	88	90	100	95	95	100
Utah	68	66	76	75	75	81
Nev.	90	77	80	80	95	100
Wash.	82	80	95	105	90	95
Oreg.	90	93	94	95	91	94
Calif.	95	95	110	120	103	109
U.S.	76.09	79.20	83.61	91.07	86.07	91.30

Table XIVII-c. ESTIMATED NUMBER AND VALUE OF ALL CHICKENS  
ON FARMS ON JANUARY 1, 1924 - 1929.  
By States

State	Total value of chickens January 1 (Thousands of dollars)					
	1924	1925	1926	1927	1928	1929
Me.	2,659	2,446	2,503	2,505	2,747	2,671
N.H.	1,875	1,774	1,875	1,900	2,004	1,906
Vt.	1,266	1,183	1,261	1,319	1,352	1,271
Mass.	3,314	3,045	3,350	3,021	3,243	3,186
R.I.	596	578	614	613	659	614
Conn.	2,540	2,464	2,765	2,730	3,040	3,191
N.Y.	16,912	15,618	16,873	17,069	16,308	17,195
N.J.	6,317	5,874	6,440	6,625	6,076	6,711
Pa.	18,581	19,064	20,908	21,978	22,658	23,031
Ohio	19,301	18,997	22,643	23,549	22,215	22,489
Ind.	14,566	14,522	16,315	17,394	15,361	16,464
Ill.	22,653	22,096	25,453	26,472	25,006	27,419
Mich.	11,407	11,660	13,061	14,134	13,932	14,938
Wis.	10,033	10,626	12,156	13,576	13,023	13,744
Minn.	10,460	11,715	13,157	13,321	12,256	13,755
Iowa	23,764	23,614	27,753	28,625	27,166	28,804
Mo.	23,028	20,150	24,249	26,973	26,973	26,931
N.D.	2,974	3,035	3,309	3,737	3,611	4,098
S.D.	5,463	4,951	5,887	6,745	6,252	7,032
Nebr.	8,806	7,908	9,687	10,390	10,340	11,316
Kans.	13,500	13,750	16,470	18,285	16,779	18,151
Del.	1,547	1,392	1,601	1,721	1,535	1,514
Md.	4,468	4,108	5,033	5,288	4,762	4,691
Va.	8,674	7,807	8,635	9,532	9,915	9,385
W.Va.	4,042	3,682	4,214	4,203	4,272	4,272
N.C.	7,369	6,942	7,120	7,569	8,194	7,114
S.C.	3,390	3,186	2,995	3,520	3,524	2,979
Ga.	5,235	5,440	5,229	5,300	5,854	5,079
Fla.	2,032	2,034	2,258	2,448	2,267	1,996
Ky.	8,130	7,767	8,497	9,521	8,655	9,072
Tenn.	8,458	8,308	9,186	10,271	10,334	9,534
Ala.	4,675	4,207	4,337	4,803	4,750	4,366
Miss.	4,704	4,294	4,552	4,986	5,020	4,740
Ark.	4,958	4,363	5,282	5,715	5,500	5,713
La.	3,431	2,722	3,129	3,590	3,303	3,489
Okla.	7,746	8,368	10,083	12,086	11,380	12,056
Tex.	12,558	12,837	12,782	15,220	16,163	15,191
Mont.	1,734	1,782	1,843	1,973	2,221	2,405
Idaho	1,232	1,275	1,536	1,610	1,870	2,155
Wyo.	557	566	579	662	762	763
Colo.	2,691	2,514	2,848	3,207	3,173	3,376
N.Mex.	718	656	666	791	828	837
Ariz.	524	530	720	321	698	676
Utah	976	948	1,068	1,232	1,354	1,571
Nev.	234	180	226	244	274	286
Wash.	4,667	4,462	5,827	7,407	7,482	7,193
Oreg.	3,151	2,761	3,126	3,507	3,905	3,806
Calif.	13,597	12,510	15,209	18,251	17,862	16,622
U.S.	341,765	330,871	375,900	408,619	398,836	405,798

Table XXVIII a-e. NUMBER AND VALUE OF CHICKENS RAISED, CONSUMED AND SOLD  
1924 - 1928.

Number of chickens raised in 1924 based primarily upon farmers estimates given to enumerators in January, 1925. Owing to shortage in these Census returns due probably to memory bias, and upon evidence of a larger production drawn from studies of movement of chickens into consumption, the Census figures have been increased a flat 8 per cent in all states, with an additional increase equal to the assumed incompleteness of the 1925 Census enumerations in certain states.

This increase is believed to be conservative and is only sufficient to take care of the minimum total indicated consumption, after allowing for production off chicken farms, for replacement of old birds lost and for net difference in numbers of birds at beginning and end of the year.

To secure net production (numbers of chickens "produced"), a deduction is made for the replacement of mature chickens lost during the year. This resulting figure of number "produced" is intended to approximate the net number of chickens produced that are consumed on the farm, sold, or retained for increase of flocks, as distinguished from the number "raised".

Estimates for number of chickens raised in years 1925-1927 were without factual basis and were fixed on the assumption that numbers raised would tend to change in the same proportion as numbers on hand at the close of the year. Estimates for numbers raised in 1928 were based mainly upon the evidence of change in numbers raised in the two years as reported by crop correspondents in their annual reports of January 1, 1928, and 1929, with some reliance in states where these data were scanty or doubtful upon the assumption of relationship in trend as numbers raised to numbers on hand at the end of the year.

Number of old chickens lost is set at the flat figure of 12 per cent of the numbers on hand January 1 on the evidence of flock records in various states and upon the results of the special inquiry incorporated in Table IX.

Estimates of chickens consumed in 1924 are based upon study of the apparent disappearance on farms in Census years, i. e., raised less mortality, sales and increase; and upon studies of consumption of poultry on farms as shown by various surveys and by the reports of crop correspondents. For change in consumption in years 1925-28, very little direct information is available. Based mainly upon changes in prices of poultry and the relation of poultry prices to prices for meat animals, especially pork, beef and mutton; and upon the relative consumption in farm households from year to year as indicated by reports of poultrymen to poultry extension offices in a few states.

Estimates of sales of chicken in 1924. Based upon study of receipts at city markets, upon quantities of poultry moved by rail, and upon other available evidence of consumption off chicken farms, including indicated supply per capita from estimated sales reported by farmers to Census enumerators in 1910 and 1920.

Sales 1925-28 represent the number of chickens available for sale, after taking from the estimated number raised the estimated replacements and farm consumption and allowing net for the increase or decrease in holdings January 1.

Price per head is based upon the reported average monthly farm price (weighted by monthly marketings) times an assumed average weight of bird. The weight per bird is derived from the 1920 Census value per head of chickens sold in 1919 divided by the 1919 weighted price per pound of chicken sold. In other words, the price differential in the different states rests largely upon the Census prices of 1919, adjusted to a 1924 level of prices, and upon the assumption that the average weight of chickens produced was the same in 1919 and in 1924.



Table XXVIII.

ESTIMATED NUMBER OF CHICKENS RAISED, AND  
NUMBER PRODUCED, CONSUMED ON FARMS, AND  
SOLD, 1924 - 1929, BY GEOGRAPHIC DIVISIONS.

Geographic Division	Year	No. of chickens-thousands			Value of chickens - 1,000 dollars			
		Raised	Produced	Consumed	Sold	Price	Raised	Produced
		:(net) 1/	on farm	:	2/	per head	:(net)	:
		:	:	:	:	cents	:	:
No. Atlantic States	1924	58,817	53,228	15,858	39,879	94.65	55,189	50,000
	1925	61,090	55,801	16,186	38,374	100.45	60,898	55,671
	1926	62,699	57,321	14,878	41,096	104.90	65,248	59,703
	1927	67,073	61,533	17,329	42,657	101.59	67,625	62,082
	1928	62,009	56,285	15,532	42,224	105.67	65,064	59,109
	1929	69,314	63,765	16,210	44,159	107.88	74,281	68,363
No. Central States	1924	298,172	270,388	96,894	189,266	71.32	211,402	191,670
	1925	310,608	284,718	98,890	181,925	75.76	234,497	214,960
	1926	323,077	296,661	90,901	198,368	81.19	261,613	240,222
	1927	337,334	309,886	105,886	202,972	76.09	255,535	234,744
	1928	320,942	293,371	94,896	202,330	82.12	262,434	239,828
	1929	358,734	331,574	97,425	217,494	83.21	293,824	271,562
So. Atlantic	1924	74,022	68,536	43,550	28,447	64.73	46,329	42,828
	1925	75,223	70,151	44,446	25,881	66.90	48,300	44,980
	1926	80,487	75,441	40,355	31,658	69.46	54,226	50,752
	1927	85,344	79,941	47,590	29,652	66.73	54,806	51,263
	1928	73,643	67,917	42,650	30,403	69.04	49,074	45,209
	1929	78,681	73,572	40,407	32,162	70.40	53,700	50,148
So. Central	1924	124,365	113,746	77,877	43,275	54.55	67,253	61,521
	1925	127,123	117,392	79,482	37,841	58.52	73,650	68,025
	1926	139,227	129,488	73,060	48,458	62.82	86,623	80,560
	1927	145,093	134,397	85,102	44,619	58.85	84,695	78,440
	1928	127,064	115,806	76,270	45,903	62.02	78,024	71,123
	1929	132,765	122,273	75,010	44,279	63.56	83,622	77,024
Western States	1924	45,392	40,971	17,466	25,790	57.51	26,211	23,663
	1925	48,277	44,131	17,838	24,765	61.55	29,743	27,192
	1926	52,298	47,974	16,387	27,991	64.77	34,110	31,303
	1927	56,836	52,080	19,086	28,252	61.62	35,236	32,289
	1928	50,602	45,277	17,107	31,267	64.03	32,670	29,261
	1929	58,054	53,026	17,425	34,663	66.18	38,677	35,334
United States	1924	600,768	546,869	251,645	326,657	70.28	406,394	369,682
	1925	622,321	572,193	256,892	309,286	74.88	447,088	410,828
	1926	657,788	606,885	236,081	347,571	79.04	501,820	462,540
	1927	691,680	637,837	274,993	348,152	75.03	497,897	458,818
	1928	634,260	578,656	246,455	352,130	79.59	487,266	444,530
	1929	697,548	644,210	246,477	372,757	80.53	544,104	502,431

1/ Paired; less replacements for mortality of chickens on hand January 1, of year stated.

2/ Estimated price of chickens sold.

(See bottom of page 67)

This assumption may have resulted in a price somewhat too high, in the later year, because of the probability that the average weight per bird is decreasing somewhat. Absolute figures on this point are lacking. Gross income is defined as value consumed on farms (in the farm household) plus sale (or cash income from sales).

Table XXVIII-a

NUMBER OF CHICKENS RAISED, CONSUMED,  
AND SOLD BY FARMS, 1924.

Number of chickens - Thousands:					Price	Value of chickens, ..			
State:	Raised:	Produced:	Consumed:	Sold:	per head:	Dollars, in thousands			
:	1/	on	:	:	(conts):	Raised:	Produced:	Gross Income	:
:	:	farm	:	:	:	:	:	Consumed:	Sold
:	:	:	:	:	:	:	:	on farm:	(cash
:	:	:	:	:	:	:	:	:	income)
No.	3,152	2,697	661	2,206	99	3,120	2,868	852	2,184
N.H.	2,764	2,609	407	2,223	96	2,653	2,505	391	2,139
Vt.	1,487	1,361	469	976	93	1,333	1,266	436	903
Mass.	3,914	3,665	757	2,949	98	3,336	3,592	742	2,890
R.I.	560	517	102	415	112	627	579	114	465
Conn.	2,578	2,668	679	2,042	110	3,166	2,935	747	2,246
N. Y.	16,750	14,970	4,906	10,894	86	14,405	12,874	4,271	9,369
N. J.	6,039	5,493	903	4,906	117	7,066	6,433	1,062	5,740
Pa.	21,273	19,043	6,709	13,263	89	13,933	16,940	5,971	11,804
Ohio	29,620	26,895	8,560	18,697	78	23,104	20,978	7,457	14,584
Ind.	27,772	25,437	9,305	17,884	74	20,551	18,823	6,806	13,234
Ill.	35,062	31,634	10,282	23,923	81	23,400	25,624	8,323	19,378
Mich.	16,962	15,272	5,503	10,891	78	13,230	11,912	4,296	8,495
Wis.	15,607	13,911	6,076	8,603	69	10,769	9,599	4,192	5,991
Minn.	22,378	20,286	7,496	13,487	66	14,769	13,339	4,947	8,901
Iowa	41,164	37,258	9,846	29,691	74	30,461	27,571	7,236	21,971
Mo.	38,041	34,203	12,184	25,217	67	25,437	22,916	8,163	16,895
N. Dak.	6,230	5,569	3,314	2,530	54	3,364	3,007	1,790	1,366
S. Dak.	11,549	10,540	4,477	6,463	62	7,160	6,535	2,776	4,019
Nebr.	22,113	20,409	8,012	12,965	64	14,152	13,062	5,123	8,298
Kans.	31,674	28,974	10,834	18,815	63	19,955	18,254	6,825	11,852
Del.	1,739	1,553	534	1,174	83	1,443	1,289	443	974
Md.	6,690	6,114	2,619	3,975	79	5,285	4,830	2,069	3,140
Va.	17,474	16,220	9,390	7,875	61	10,659	9,394	5,723	4,804
W. Va.	5,834	5,243	2,750	2,986	73	4,259	3,827	2,008	2,180
N. C.	16,881	15,733	10,457	5,946	55	9,235	8,653	5,751	3,270
S. C.	8,694	8,137	6,844	1,572	61	5,303	4,964	4,175	959
Ga.	13,639	12,742	9,428	3,533	56	7,633	7,136	5,200	1,981
Fla.	3,071	2,794	1,528	1,381	80	2,457	2,235	1,222	1,105
Ky.	18,083	16,582	10,429	7,404	57	10,307	9,452	5,945	4,220
Tenn.	17,930	16,319	9,690	7,837	55	9,362	8,975	5,330	4,310
Ala.	10,578	9,715	7,667	2,767	52	5,501	5,052	3,987	1,439
Miss.	10,264	9,446	7,286	2,842	50	5,132	4,723	3,643	1,421
Ark.	11,172	10,146	6,425	4,747	58	6,480	5,835	3,726	2,753
La.	6,092	5,550	4,505	1,498	62	3,777	3,441	2,793	920
Okla.	21,629	19,969	11,815	8,707	55	11,896	10,983	6,493	4,789
Tex.	28,617	26,019	20,060	7,475	50	14,300	13,010	10,030	3,738
Mont.	3,367	2,971	2,027	1,196	53	1,753	1,575	1,074	634
Idaho	2,820	2,556	1,552	1,114	57	1,607	1,457	885	635
Wyo.	1,203	1,100	582	603	53	640	583	308	322
Colo.	5,397	4,908	2,472	2,762	63	3,400	3,092	1,557	1,740
N. Mex.	1,247	1,113	726	499	69	860	771	501	344
Ariz.	840	769	310	399	83	697	633	257	331
Utah	1,860	1,688	660	1,023	55	1,023	920	363	561
Nev.	314	283	131	173	72	226	204	94	128
Wash.	7,914	7,231	2,313	4,532	55	4,353	3,977	1,547	2,193
Oreg.	4,515	4,095	1,377	2,383	60	2,789	2,467	1,126	1,436
Calif.	15,970	14,252	4,316	11,081	56	8,543	7,981	2,417	6,205
U.S.	600,768	576,559	251,645	326,657	70.28	406,394	369,682	161,417	229,574



Table XXVIII-b.

NUMBER OF CHICKENS RAISED, CONSUMED  
AND SOLD BY FARMS, 1925.

State:	Number of chickens - Thousands:				Price per head: (cents)	Value of chickens dollars in thousands:			
	Raised:	Produced:	Consumed:	Sold		Raised:	Produced:	Gross Income	
	:	:	:	:		:	:	Consumed:	Sold
	:	:	:	:		:	:	on farm:	(cash income)
Mo.	3,216	2,981	879	2,101	101	3,248	3,011	888	2,122
N.H.	2,820	2,668	416	2,252	101	2,848	2,695	420	2,275
Vt.	1,608	1,492	479	1,013	97	1,560	1,447	465	983
Mass.	3,994	3,750	772	2,978	102	4,074	3,825	787	3,038
R.I.	571	528	104	424	117	668	618	122	496
Conn.	3,084	2,880	693	2,102	114	3,516	3,283	790	2,396
N.Y.	17,092	15,419	5,069	10,350	91	15,554	14,031	4,613	9,418
N.J.	6,347	5,843	927	4,790	122	7,743	7,128	1,131	5,344
Pa.	22,358	20,240	6,847	12,864	97	21,687	19,633	6,642	12,478
Ohio	32,037	29,476	9,757	18,421	83	26,591	24,465	8,098	15,289
Ind.	28,339	26,214	9,497	17,071	79	22,388	20,709	7,503	13,486
Ill.	36,494	33,375	10,494	22,362	84	30,655	28,035	8,815	18,784
Mich.	18,173	16,618	5,621	10,461	85	15,447	14,125	4,778	8,892
Wis.	16,562	14,968	6,201	8,236	75	12,424	11,226	4,651	6,177
Minn.	23,520	21,512	7,651	13,855	70	16,464	15,058	5,356	9,698
Iowa	43,264	39,631	10,048	28,675	77	33,313	30,516	7,737	22,080
Mo.	40,370	36,916	12,435	23,330	73	29,470	26,949	9,078	17,031
N.Dak.	6,611	5,983	3,383	2,391	56	3,702	3,350	1,894	1,339
S.Dak.	11,903	10,945	4,569	6,296	68	8,094	7,443	3,107	4,281
Nebr.	21,661	20,025	8,177	12,393	68	14,729	13,617	5,560	18,427
Kans.	31,674	29,055	11,057	18,434	67	21,222	19,467	7,408	12,351
Del.	1,775	1,608	544	1,064	88	1,562	1,415	479	936
Md.	7,032	6,513	2,673	3,710	83	5,837	5,406	2,219	3,079
Va.	18,188	17,059	9,583	7,288	63	11,458	10,747	6,037	4,591
W.Va.	5,953	5,421	2,807	2,614	79	4,703	4,283	2,218	2,065
N.C.	17,226	16,158	10,672	5,486	55	9,474	8,837	5,870	3,017
S.C.	8,339	7,815	6,985	1,092	58	4,837	4,533	4,051	633
Ga.	13,639	12,769	9,623	3,334	58	7,911	7,406	5,581	1,934
Fla.	3,071	2,808	1,559	1,293	82	2,518	2,303	1,278	1,060
Ky.	18,821	17,470	10,644	6,600	61	11,481	10,657	6,493	4,026
Tenn.	18,845	17,379	9,890	7,122	59	11,119	10,254	5,835	4,202
Ala.	10,794	10,017	7,825	2,192	53	5,721	5,309	4,147	1,162
Miss.	11,101	10,365	7,436	2,561	56	6,217	5,804	4,164	1,434
Ark.	11,970	11,067	6,558	4,133	60	7,182	6,640	3,935	2,480
La.	6,216	5,728	4,598	1,130	63	3,916	3,609	2,897	712
Okla.	22,511	20,917	12,058	8,516	60	13,507	12,550	7,235	5,110
Tex.	26,865	24,449	20,473	5,587	54	14,507	13,202	11,055	3,017
Mont.	3,441	3,136	2,069	1,016	56	1,927	1,756	1,159	569
Idaho	3,022	2,771	1,584	1,083	62	1,874	1,718	982	671
Wyo.	1,208	1,111	654	473	61	737	678	399	289
Colo.	5,727	5,277	2,523	2,604	60	3,894	3,588	1,716	1,771
N.Mex.	1,170	1,054	741	390	61	714	643	452	238
Ariz.	943	864	317	482	77	726	665	244	371
Utah	1,822	1,650	673	1,008	58	1,057	957	390	585
Nev.	342	314	134	163	65	222	204	87	106
Wash.	8,884	8,215	2,871	4,787	60	5,330	4,929	1,723	2,872
Oreg.	4,607	4,208	1,916	2,292	65	2,995	2,735	1,245	1,490
Calif.	17,111	15,531	4,406	10,467	60	10,267	9,318	2,644	6,280
U.S.	622,321	572,193	256,892	309,286	74.88	417,088	410,820	174,378	231,505



TABLE XXVIII-C. NUMBER OF CHICKENS RAISED, CONSUMED AND SOLD BY FARMS, 1926.

State	Number of chickens - Thousands:				Price per head: (cents)	Value of chickens dollars in thousands:			
	Raised	Produced	Consumed	Sold		Raised	Produced	Gross Income	
								Consumed	Sold
Mo.	3,120	2,885	808	2,136	106	3,307	3,058	856	2,264
N.H.	2,764	2,612	382	2,255	103	2,847	2,690	393	2,323
Vt.	1,656	1,540	440	1,071	109	1,805	1,679	480	1,167
Mass.	3,834	3,590	710	2,961	105	4,026	3,770	746	3,109
R.I.	605	562	96	444	125	756	702	120	555
Conn.	3,146	2,932	637	2,259	125	3,932	3,665	796	2,824
N.Y.	17,434	15,761	4,659	10,823	96	16,737	15,131	4,473	10,390
N.J.	6,664	6,145	852	5,077	129	8,597	7,927	1,099	6,549
Pa.	23,476	21,294	6,294	14,070	99	23,241	21,081	6,231	13,929
Ohio	33,318	30,601	8,969	20,726	86	28,653	26,317	7,713	17,824
Ind.	30,039	27,956	8,730	18,272	84	25,233	23,483	7,333	15,348
Ill.	37,954	31,772	9,646	24,065	89	33,779	30,947	8,585	21,413
Mich.	19,263	17,630	5,167	11,646	89	17,144	15,691	4,599	10,365
Wis.	17,837	16,229	5,700	9,424	81	14,488	13,145	4,617	7,633
Minn.	23,990	21,940	7,032	14,870	75	17,992	16,455	5,274	11,152
Iowa	44,129	40,387	9,236	30,528	85	37,510	34,329	7,851	25,949
Mo.	42,792	39,200	11,431	25,973	78	33,378	30,576	8,916	20,259
N.Dak.	6,413	5,760	3,109	2,830	65	4,168	3,744	2,021	1,840
S.Dak.	12,141	11,173	4,200	6,812	74	8,984	8,268	3,108	5,041
Nebr.	22,527	20,956	7,517	12,916	76	17,121	15,927	5,713	9,816
Kans.	32,624	30,057	10,164	20,306	71	23,163	21,340	7,216	14,417
Del.	1,823	1,661	500	1,119	97	1,773	1,611	485	1,085
Md.	7,454	6,920	2,457	4,196	87	6,485	6,020	2,138	3,651
Va.	19,643	18,492	8,809	8,916	66	12,964	12,205	5,814	5,885
W.Va.	6,132	5,600	2,580	2,887	80	4,906	4,480	2,064	2,310
N.C.	18,087	17,019	9,810	6,764	58	10,490	9,871	5,690	3,923
S.C.	9,173	8,681	6,421	1,850	61	5,596	5,295	3,917	1,128
Ga.	14,730	13,886	8,845	4,475	61	8,985	8,470	5,395	2,730
Fla.	3,440	3,182	1,433	1,451	83	3,027	2,800	1,261	1,277
Ky.	20,327	18,949	9,784	8,247	64	13,009	12,127	6,262	5,278
Tenn.	19,976	18,466	9,091	8,620	64	12,785	11,818	5,818	5,517
Ala.	11,442	10,665	7,193	3,033	55	6,293	5,866	3,956	1,696
Miss.	11,989	11,209	6,835	3,854	57	6,834	6,339	3,896	2,197
Ark.	12,688	11,740	6,028	5,030	65	8,247	7,631	3,918	3,302
La.	7,148	6,660	4,226	1,773	64	4,575	4,262	2,705	1,135
Okla.	24,762	23,127	11,084	10,562	66	16,343	15,264	7,315	6,971
Tex.	30,895	28,672	18,319	7,239	60	18,537	17,203	11,291	4,343
Mont.	3,269	2,957	1,902	1,185	63	2,059	1,863	1,198	747
Idaho	3,264	3,001	1,456	1,325	68	2,220	2,041	990	901
Wyo.	1,263	1,173	546	592	69	875	809	377	408
Colo.	6,185	5,717	2,319	3,036	75	4,639	4,238	1,739	2,314
N.Mex.	1,287	1,130	801	410	71	914	833	404	291
Ariz.	1,132	1,046	291	611	33	940	868	242	507
Utah	2,095	1,926	619	1,070	53	1,215	1,117	359	621
Nev.	369	339	123	196	93	343	315	114	132
Wash.	9,950	9,214	2,639	5,655	64	6,368	5,897	1,639	3,619
Oreg.	4,999	4,600	1,761	2,473	69	3,449	3,174	1,215	1,706
Calif.	18,480	16,821	4,050	11,333	60	11,003	10,093	2,430	6,833
U.S.	657,733	606,335	236,001	347,571	76.04	501,320	462,540	170,902	274,729

Table XXVIII-d.

NUMBER OF CHICKENS RAISED, CONSUMED  
AND SOLD BY FARMS, 1927.

	Number of chickens - Thousands				Price	Value of chickens - 1900			
					per head:	dollars in thousands			
State	Raised	Produced	Consumed	Sold	(cents)	Raised	Produced	Gross Income	
								Consumed	Sold
								on farm	(cash
									income)
Mo.	3,330	3,110	941	2,047	103	3,430	3,203	969	2,103
N.H.	2,902	2,753	445	2,214	100	2,902	2,753	445	2,214
Vt.	1,739	1,619	513	1,065	105	1,826	1,700	539	1,118
Mass.	3,834	3,600	827	2,695	102	3,911	3,672	841	2,749
R.I.	666	620	111	430	113	753	701	125	542
Conn.	3,775	3,557	742	2,674	114	4,304	4,055	846	3,043
N.Y.	18,131	16,424	5,427	10,855	93	16,362	15,274	5,047	10,095
N.J.	6,864	6,319	992	5,191	125	8,530	7,899	1,240	6,459
Pa.	25,324	23,531	7,331	15,436	97	25,049	22,325	7,111	14,973
Ohio	34,904	32,150	10,447	21,373	92	25,637	26,370	3,567	17,526
Ind.	32,442	30,245	10,169	20,565	78	25,305	23,591	7,932	16,041
Ill.	39,852	36,543	11,236	25,103	84	33,476	30,696	9,433	21,007
Mich.	21,189	19,453	6,019	12,713	86	18,223	16,734	5,176	10,937
Wis.	18,731	16,991	6,640	10,471	76	14,274	12,913	5,046	7,953
Minn.	24,230	22,157	8,192	14,759	70	16,961	15,510	5,734	10,331
Iowa	45,453	41,636	10,759	30,343	73	35,453	32,476	8,392	23,663
Mo.	44,932	41,124	13,315	27,309	72	32,351	29,609	9,537	20,022
N.Dak.	6,285	5,653	3,622	2,136	61	3,834	3,443	2,209	1,303
S.Dak.	12,505	11,513	4,392	6,403	71	8,379	8,173	3,473	4,546
Nebr.	22,752	21,113	8,756	12,133	69	15,699	14,571	6,042	8,410
Kans.	33,929	31,285	11,339	19,104	66	22,393	20,643	7,814	12,609
Del.	1,365	1,693	503	1,032	37	1,623	1,473	507	941
Md.	7,379	6,812	2,362	3,909	33	6,125	5,654	2,375	3,244
Va.	20,232	18,939	10,261	8,193	64	12,940	12,153	6,567	5,244
W.Va.	6,623	6,075	3,005	2,392	76	5,033	4,617	2,234	2,190
N.C.	19,396	18,775	11,427	6,577	57	11,341	10,702	6,513	3,749
S.C.	9,632	9,090	7,479	1,297	53	5,537	5,272	4,333	752
Ga.	15,761	14,845	10,303	3,929	57	8,984	8,462	5,373	2,240
Fla.	3,956	3,662	1,670	1,773	60	3,155	2,930	1,336	1,418
Ky.	20,327	18,339	11,397	7,304	61	12,399	11,492	6,952	4,455
Tenn.	20,975	19,374	10,539	7,968	59	12,375	11,624	6,243	4,701
Ala.	12,014	11,191	8,378	2,585	54	6,483	6,043	4,524	1,396
Miss.	12,349	11,506	7,962	3,396	54	6,663	6,213	4,299	1,334
Ark.	13,322	12,293	7,021	4,936	60	7,993	7,379	4,213	2,962
La.	6,433	5,366	4,923	1,378	64	4,117	3,754	3,151	332
Okla.	24,762	22,949	12,911	9,534	61	15,105	13,999	7,376	5,346
Tex.	34,911	32,374	21,921	7,468	56	19,550	18,129	12,276	4,182
Mont.	3,432	3,136	2,215	711	64	2,196	2,007	1,418	455
Idaho	3,427	3,137	1,696	1,293	64	2,193	2,003	1,035	328
Wyo.	1,433	1,334	636	573	64	917	854	407	367
Colo.	6,135	5,679	2,701	2,504	73	4,515	4,146	1,972	2,120
N.Mex.	1,454	1,337	793	402	66	950	832	523	265
Ariz.	962	553	339	643	33	798	712	231	533
Utah	2,263	2,066	721	1,131	56	1,267	1,157	404	661
Nev.	337	354	143	194	66	255	234	94	128
Wash.	11,243	10,402	3,074	6,069	60	6,749	6,241	1,344	3,641
Oreg.	5,537	5,144	2,051	2,494	63	3,520	3,241	1,292	1,571
Calif.	20,458	18,633	4,717	11,783	53	11,366	10,307	2,736	6,334
U.S.	691,650	637,537	274,993	348,152	75.03	497,397	458,318	137,964	261,226



Table XXVIII-c. NUMBER OF CHICKENS RAISED, CONSUMED  
AND SOLD BY FARMS, 1923.

State	Number of chickens - Thousands:				Price per head: (cents)	Value of chickens - 1923 - dollars in thousands:			
	Raised	Produced	Consumed	Sold		Raised	Produced	Gross Income	
	:	:	:	:		:	:	Consumed:	Sold
	:	:	:	:		:	:	on farm:	(cash income)
Me.	3,233	2,996	344	2,264	107	3,465	3,206	903	2,422
N.H.	2,757	2,597	399	2,263	104	2,867	2,701	415	2,354
Vt.	1,652	1,527	460	1,129	110	1,817	1,600	506	1,242
Mass.	3,631	3,433	741	2,733	105	3,845	3,610	773	2,370
R.I.	599	550	100	471	120	719	660	120	565
Conn.	3,775	3,540	665	2,777	117	4,417	4,142	773	3,249
N.Y.	16,681	14,957	4,364	10,479	97	16,131	14,503	4,713	10,165
N.J.	6,384	5,823	339	4,980	133	8,491	7,745	1,182	6,623
Pa.	23,242	20,357	6,570	15,123	100	23,242	20,357	6,570	15,123
Ohio	31,335	28,969	9,353	20,303	89	28,333	25,732	8,333	18,074
Ind.	29,347	27,703	9,113	19,005	86	25,668	23,829	7,337	16,413
Ill.	37,959	34,562	10,070	24,323	90	34,073	31,106	9,063	22,341
Mich.	19,070	17,253	5,394	12,499	91	17,354	15,700	4,909	11,374
Wis.	17,842	16,066	5,951	10,447	82	14,630	13,174	4,300	3,567
Minn.	24,230	22,215	7,342	14,676	76	18,415	16,883	5,500	11,154
Iowa	42,271	38,390	9,642	29,003	85	35,930	32,632	3,196	24,721
Mo.	41,337	37,529	11,933	26,726	79	32,656	29,643	9,427	21,114
N.Dak.	6,411	5,792	3,246	2,302	63	4,039	3,649	2,045	1,501
S.Dak.	12,330	11,366	4,304	7,459	75	10,046	9,255	3,420	5,816
Nebr.	22,752	21,093	7,847	13,597	75	17,064	15,825	5,835	10,175
Kans.	34,603	31,923	10,611	21,275	70	24,226	22,346	7,423	14,892
Del.	1,772	1,597	522	1,143	93	1,643	1,405	435	1,063
Md.	7,010	6,439	2,535	4,125	55	6,169	5,666	2,257	3,630
Va.	17,602	16,294	9,196	3,115	60	11,969	11,030	6,253	5,518
W.Va.	5,961	5,391	2,693	2,302	75	4,650	4,205	2,101	2,136
N.C.	16,514	15,300	10,241	6,500	58	9,573	8,874	5,940	3,770
S.C.	8,300	7,801	6,703	1,737	59	4,944	4,603	3,955	1,054
Ge.	13,239	12,250	9,234	4,207	58	7,679	7,105	5,356	2,440
Fla.	3,165	2,345	1,496	1,722	77	2,437	2,191	1,152	1,326
Ky.	17,273	15,773	10,214	7,035	66	11,403	10,410	6,741	4,643
Tenn.	17,329	16,130	9,490	3,034	63	11,232	10,162	5,979	5,093
Ala.	10,212	9,361	7,509	2,705	55	5,617	5,149	4,130	1,488
Miss.	10,250	9,339	7,135	2,341	54	5,535	5,070	3,853	1,534
Ark.	12,339	11,324	6,293	5,501	61	7,557	6,903	3,839	3,356
La.	6,111	5,596	4,412	1,166	65	3,972	3,637	2,863	753
Okla.	24,019	22,152	11,571	10,635	65	15,612	14,399	7,521	6,945
Tex.	28,976	26,031	19,646	7,336	59	17,096	15,388	11,591	4,653
Mont.	3,535	3,214	1,936	1,213	65	2,293	2,039	1,291	733
Idaho	3,530	3,223	1,520	1,605	67	2,365	2,159	1,013	1,075
Wyo.	1,361	1,247	570	772	66	893	823	376	510
Colo.	6,247	5,732	2,421	3,406	73	4,560	4,104	1,757	2,436
N.Mex.	1,309	1,175	711	432	63	890	799	433	323
Ariz.	866	778	304	533	63	719	646	252	442
Utah	2,277	2,060	646	1,230	63	1,435	1,293	407	806
Nev.	375	340	123	214	70	262	233	90	150
Wash.	9,405	8,467	2,755	6,393	64	6,019	5,300	1,763	4,092
Oreg.	5,131	4,646	1,833	3,023	64	3,284	2,954	1,176	1,933
Calif.	16,566	14,435	4,224	12,349	60	9,940	8,691	2,537	7,409
U.S.	634,260	573,655	246,455	352,130	75.59	407,266	444,530	178,154	219,243



Table. XXVII-f

## NUMBER OF CHICKENS RAISED, CONSUMED AND SOLD BY FARMS, 1929

State:	Number of chickens in thousands :				Price per head (cents)	Value of chickens dollars in thousands			
	Raised:	Produced:	Consumed:	Sold		Raised:	Produced:	Gross income	
								Consumed on farm	Sold (cash in- come)
Me.	3,562	3,333	827	2,363	110	3,918	3,666	910	2,599
N.H.	2,978	2,825	379	2,336	109	3,246	3,079	413	2,546
Vt.	1,900	1,783	483	1,183	114	2,166	2,033	551	1,349
Mass.	4,049	3,810	719	2,930	105	4,251	4,000	755	3,076
R.I.	671	624	105	494	125	839	780	131	618
Conn.	4,077	3,830	732	2,936	118	4,811	4,519	864	3,464
N.Y.	18,349	16,671	5,156	10,874	100	18,349	16,671	5,156	10,874
N.J.	6,767	6,212	845	5,114	128	8,662	7,951	1,082	6,546
Pa.	26,961	24,677	6,964	15,929	104	28,039	25,664	7,243	16,566
Ohio	36,610	33,828	9,269	22,790	90	32,949	30,445	8,342	20,511
Ind.	32,832	30,752	9,204	20,144	88	28,892	27,062	8,100	17,727
Ill.	40,888	37,630	10,070	25,950	89	36,390	33,491	8,962	23,096
Mich.	21,930	20,190	5,826	13,270	93	20,395	18,777	5,418	12,341
Wis.	19,626	17,890	6,070	10,965	83	16,290	14,849	5,038	9,101
Minn.	28,107	26,018	7,342	17,460	76	21,361	19,774	5,580	13,270
Iowa	48,612	44,771	9,738	32,325	83	40,348	37,160	8,083	26,830
Mo.	46,297	42,625	12,172	27,935	80	37,038	34,100	9,738	22,348
N.Dak.	7,437	6,798	3,376	3,075	62	4,611	4,215	2,093	1,906
S.Dak.	14,812	13,795	4,691	8,489	77	11,405	10,622	3,612	6,537
Nebr.	25,937	24,320	8,632	14,356	74	19,193	17,997	6,388	10,623
Kans.	35,646	32,957	11,035	20,735	70	24,952	23,070	7,724	14,514
Del.	1,949	1,782	496	1,254	96	1,871	1,711	476	1,204
Md.	7,501	6,960	2,565	4,295	90	6,751	6,264	2,308	3,866
Va.	18,482	17,297	8,828	8,145	69	12,753	11,935	6,091	5,620
W.Va.	6,438	5,881	2,639	3,009	79	5,086	4,646	2,085	2,377
N.C.	18,165	17,124	9,729	7,301	59	10,717	10,103	5,740	4,308
S.C.	8,631	8,134	6,234	1,879	62	5,351	5,043	3,865	1,165
Ga.	14,033	13,187	8,495	4,513	60	8,420	7,912	5,097	2,708
Fla.	3,482	3,207	1,421	1,766	72	2,751	2,534	1,123	1,395
Ky.	19,524	18,196	10,827	6,363	67	13,081	12,191	7,254	4,263
Tenn.	17,829	16,304	9,490	6,705	65	11,589	10,598	6,163	4,358
Ala.	10,723	9,975	7,058	2,499	57	6,112	5,686	4,023	1,424
Miss.	10,250	9,460	6,850	2,285	56	5,740	5,298	3,836	1,280
Ark.	12,389	11,381	6,104	4,930	65	8,053	7,398	3,968	3,204
La.	6,355	5,833	4,412	1,204	65	4,131	3,795	2,868	783
Okla.	24,980	23,125	11,802	10,927	66	16,487	15,262	7,789	7,212
Tex.	30,715	27,994	18,467	9,366	60	18,429	16,796	11,080	5,620
Mont.	3,394	3,050	1,887	1,313	64	2,172	1,952	1,208	840
Idaho	3,706	3,379	1,520	1,925	69	2,557	2,332	1,049	1,328
Wyo.	1,388	1,276	598	637	68	944	868	407	433
Colo.	6,872	6,332	2,615	3,347	74	5,085	4,686	1,935	2,477
N.Mex.	1,440	1,308	768	531	70	1,008	916	538	372
Ariz.	866	785	319	466	86	745	675	274	401
Utah	2,546	2,313	659	1,429	63	1,604	1,457	415	900
Nev.	412	378	128	245	73	301	276	93	179
Wash.	11,286	10,377	2,755	7,279	68	7,674	7,056	1,873	4,950
Oreg.	5,388	4,902	1,948	3,100	69	3,718	3,382	1,344	2,139
Calif.	20,756	18,926	4,228	14,391	62	12,869	11,734	2,621	8,322
U.S.	697,548	644,210	246,477	372,757	80.53	544,104	502,431	181,711	300,170

## HENS AND PULLETS IN FARM FLOCKS

The monthly and annual changes in numbers of chickens in laying flocks are reflected quite closely in the reported numbers in the flocks of crop correspondents on the first day of each month. The relative numbers on January 1 shown in tables XXIXa-e are not in all cases in agreement with the relation shown in the estimates of total numbers of chickens shown in table XXVI, both because the latter include other chickens in addition to hens and pullets of laying age, and because the estimates are based upon a larger sample and take into consideration other sources of information. The seasonal trend of numbers in the laying flock is shown to be surprisingly uniform from year to year, although affected by the trend toward increase or decrease in size of flock resulting from favorable or unfavorable returns to producers.

Changes in average numbers per flock in the United States for the four years 1925-1928 are shown graphically on figure 12 and the numbers for 1929 and 1930 with the average for the 5 years 1925-1929 on figure 13.

Table XXIXa-e.

The average numbers shown in Tables XXIXa-e, of hens and pullets in farm flocks, monthly, 1925-1929, relate to flocks having less than 400 Hens and Pullets on January 1 and corresponding numbers in other months.

In order to avoid the irregularity in the averages that was found to result from the inclusion of large flocks that might report one month and fail to report the next, large flocks were excluded from the tabulations if they numbered as much as or more than 400 in January, February, March and December; 390 in April, 375 in May, 370 in November, 355 in June, 340 in July and October, 330 in August and 320 in September. In view of the tendency toward increase in the proportion of commercial flocks this exclusion may have resulted in showing averages in the later years relatively too low compared with the earlier ones in states where commercial flocks have a considerable fraction of the total chickens, but its effect in most states would not be large and the U. S. total is not likely affected more than one or two per cent in any one year.

These averages are not to be taken as representing all farms, being considerably above the U. S. average of 74 head of chickens reported by the Census as of January 1, 1925, for farms keeping chickens. They do, however, reflect reasonably well for most states, the relative size of flock, in successive months and years. Comparisons between states are valid for states of similar character, but can not be fairly made between all states; for instance, between southern and northern states, because the reported figures for the south are relatively much larger compared with the average Census farm in that section; than the spread between the reported figures from crop correspondents and those of Census farms in other sections.

Figures for a few of the smaller states, from which returns tend to be few, are too irregular to be of much value except as very rough approximations.

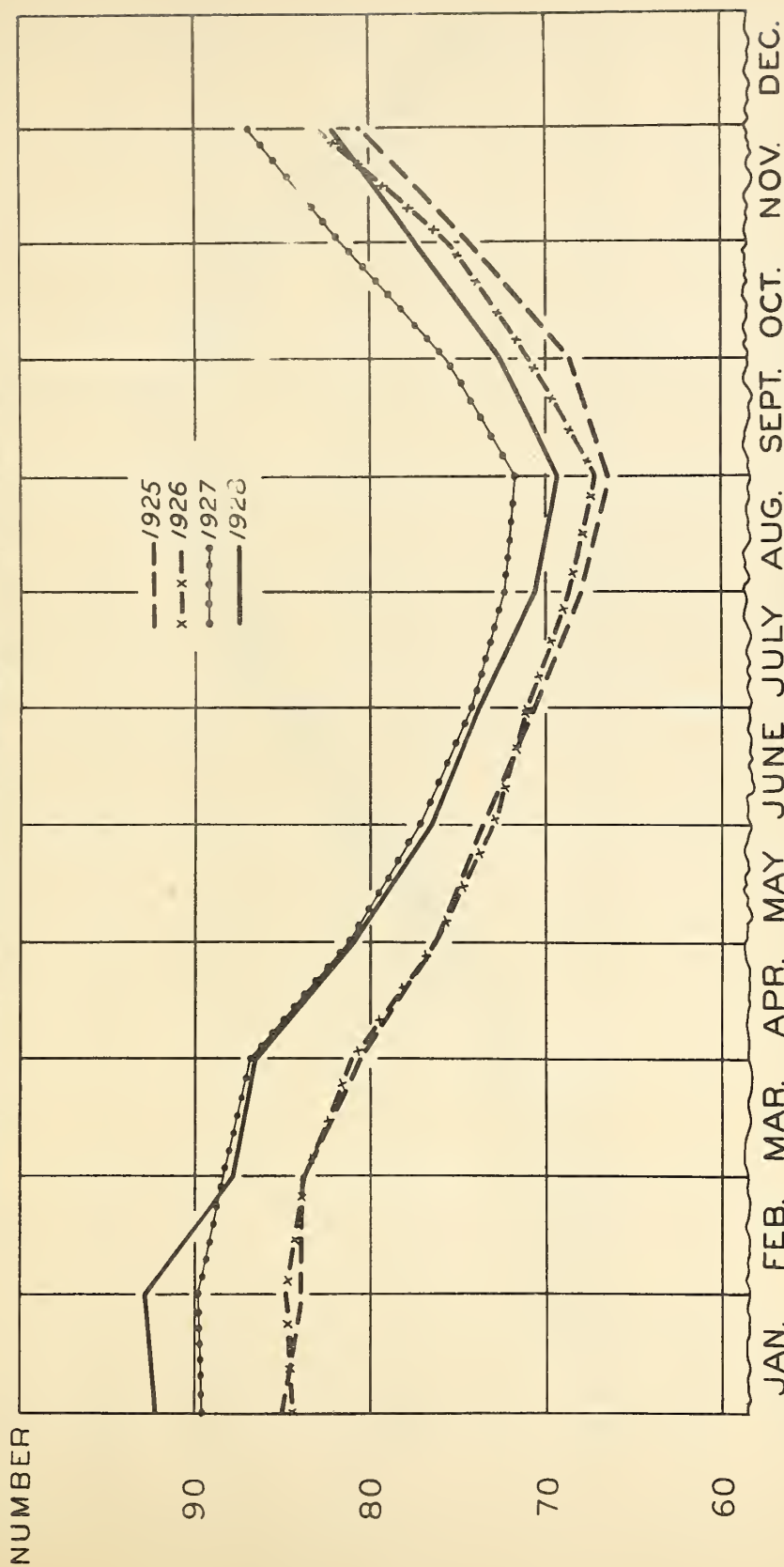
Table XXIX.

NUMBER OF  
HENS AND PULLETS PER FARM FLOCK  
BY  
GEOGRAPHIC DIVISIONS

Geographic division	: Year:	: Jan.:	: Feb.:	: Mar.:	: April:	: May:	: June:	: July:	: Aug.:	: Sept.:	: Oct.:	: Nov.:	: Dec.:
North Atlantic States	1925	38.0	39.3	39.3	35.0	32.4	30.0	74.3	72.3	69.3	71.0	73.3	34.9
	1926	91.1	87.3	87.0	86.8	82.7	81.7	77.9	75.2	70.3	73.0	81.4	36.3
	1927	92.3	91.7	91.0	89.3	85.1	81.6	79.3	77.0	73.5	76.0	83.5	90.5
	1928	96.4	94.4	91.5	89.0	84.6	82.0	73.1	74.2	71.0	74.2	85.9	87.0
	1929	92.4	91.5	89.3	88.3	82.9	79.5	75.3	72.3	70.3	75.3	87.2	92.6
North Central States	1925	113.6	113.5	113.4	103.3	105.0	99.7	94.5	90.0	87.9	89.6	93.9	107.3
	1926	113.2	115.5	113.3	111.0	105.3	100.5	96.6	91.2	88.6	92.3	97.8	103.7
	1927	119.0	120.0	118.5	116.2	109.6	104.1	97.7	92.3	92.5	94.3	102.4	111.9
	1928	116.7	119.4	116.8	114.0	108.3	101.3	96.9	90.3	88.8	92.2	99.6	108.9
	1929	116.3	115.4	112.6	111.3	106.7	101.1	95.3	89.3	85.9	89.7	101.4	111.2
South Atlantic States	1925	61.1	62.3	62.7	60.1	55.9	53.3	51.2	49.6	49.1	50.9	54.7	59.1
	1926	60.1	60.2	59.4	56.3	53.2	51.9	51.1	48.3	49.3	52.7	56.3	61.0
	1927	65.0	64.4	61.3	60.4	57.6	56.1	54.3	53.2	51.1	56.0	60.1	64.7
	1928	63.1	63.6	65.5	63.7	58.9	56.4	54.4	53.0	52.6	54.5	56.6	59.6
	1929	62.3	60.0	59.1	56.6	53.1	51.5	49.1	50.0	49.3	53.4	56.9	60.3
South Central States	1925	66.5	67.2	64.1	61.2	58.0	55.3	53.4	51.3	52.0	53.9	58.3	62.9
	1926	65.7	66.3	65.2	61.3	57.4	54.6	53.5	51.9	52.5	57.3	61.9	63.2
	1927	73.1	74.4	72.6	70.5	64.1	60.5	57.7	53.4	60.2	66.6	69.7	73.1
	1928	73.5	72.4	73.2	69.8	63.5	60.4	58.2	55.3	57.3	60.7	62.3	66.0
	1929	70.2	68.4	66.1	63.7	57.9	55.5	54.2	54.2	55.2	53.3	62.1	67.3
Western States	1925	67.9	69.4	63.7	65.6	63.2	61.3	59.6	57.3	53.2	61.0	64.0	66.3
	1926	69.3	70.0	67.7	65.5	63.5	60.1	57.6	56.4	56.7	60.3	65.9	69.1
	1927	72.7	73.2	73.3	73.1	68.4	64.0	61.3	60.0	61.3	66.0	70.5	76.3
	1928	79.1	77.1	75.3	73.6	70.3	67.6	64.0	64.3	63.4	62.1	65.6	63.9
	1929	72.7	72.6	71.2	68.9	67.3	63.0	60.1	60.3	59.2	53.3	65.3	70.9
United States	1925	84.5	85.1	84.1	80.5	77.0	73.7	70.1	67.4	66.4	68.2	74.4	80.5
	1926	84.3	85.2	83.5	80.8	76.6	73.4	71.0	67.9	66.9	70.8	75.8	83.2
	1927	89.9	90.4	88.9	87.0	81.4	77.5	73.7	71.6	71.6	75.6	80.8	87.3
	1928	92.1	93.0	89.1	86.6	81.1	77.0	73.6	70.1	69.2	72.2	77.0	82.3
	1929	87.5	86.1	84.0	82.1	77.4	73.8	70.3	68.3	66.9	70.6	77.7	84.4



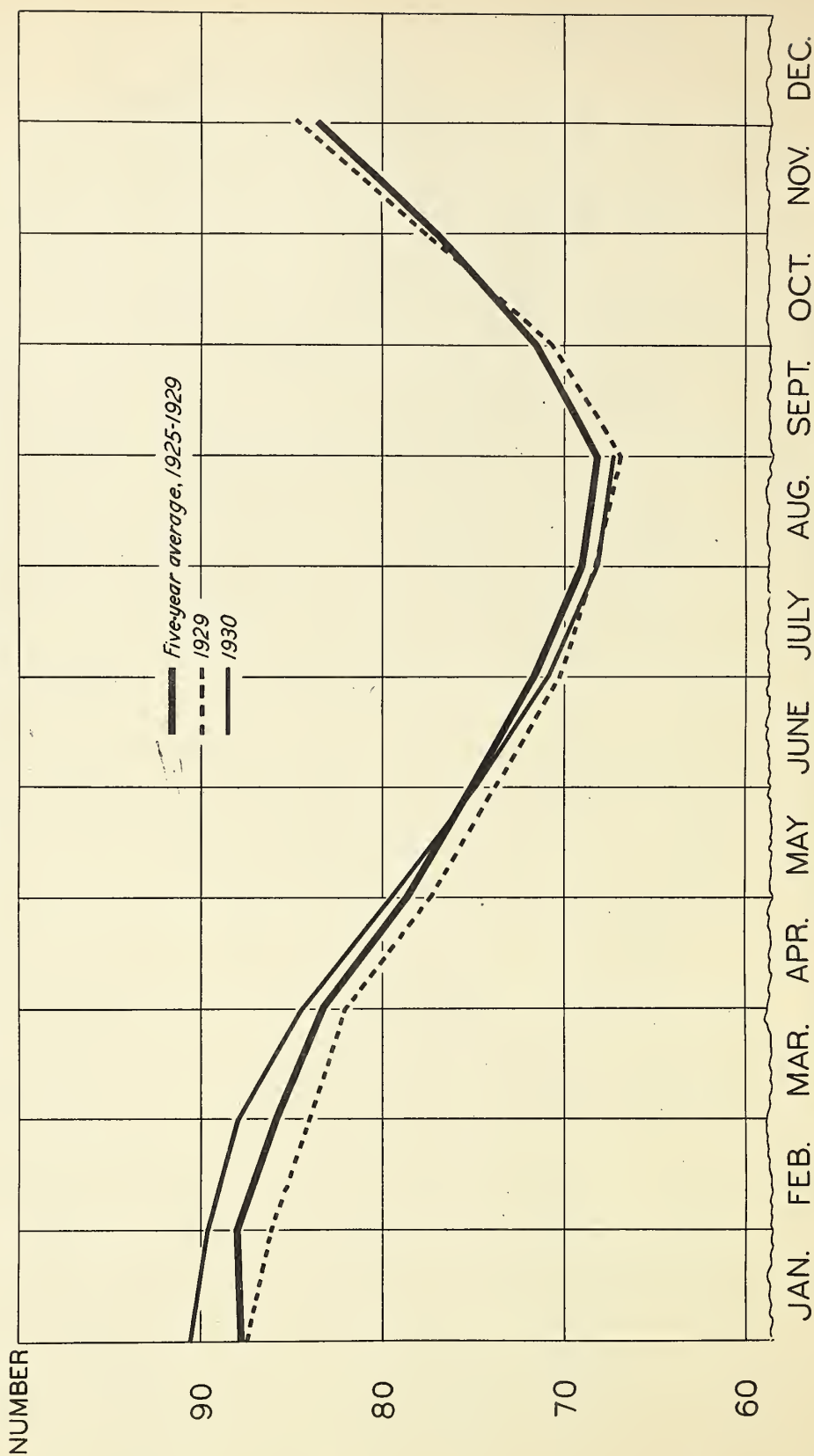
# HENS AND PULLETS OF LAYING AGE IN FARM FLOCKS ON FIRST DAY OF EACH MONTH, 1925-1928



NOTE: BASED UPON MONTHLY REPORTS FROM CROP CORRESPONDENTS COVERING THEIR OWN FLOCKS  
BUT LIMITED TO FLOCKS OF LESS THAN 400 HENS AND PULLETS ON JAN. 1

FIGURE 12

# HENS AND PULLETS OF LAYING AGE IN FARM FLOCKS ON FIRST DAY OF EACH MONTH FIVE-YEAR AVERAGE, 1925-1929, 1929, AND 1930



NOTE: BASED UPON MONTHLY REPORTS FROM CROP CORRESPONDENTS COVERING THEIR OWN FLOCKS  
BUT LIMITED TO FLOCKS OF LESS THAN 400 HENS AND PULLETS ON JAN. 1

FIGURE 13

Table XXIX-a.

NUMBER OF

HENS AND PULLETS PER FARM FLOCK, 1925, BY STATES  
IN FLOCKS OF ONE HOP REPORTERS

State:	:	:	:	:	:	:	:	:	:	:	:	:
: Jan.:	Feb.:	Mar.:	April:	May	June:	July:	Aug.:	Sept.:	October:	November:	December	:
:	:	:	:	:	:	:	:	:	:	:	:	:
Me.	70	70	68	58	57	55	54	54	54	54	60	64
N.H.	78	70	80	75	76	70	64	55	50	44	58	67
Vt.	45	47	49	46	43	49	48	45	45	39	44	45
Mass.	75	78	78	73	66	66	64	63	62	65	70	75
R.I.	100	110	114	100	100	88	79	75	72	65	70	80
Conn.	62	68	75	70	70	60	58	60	56	48	53	65
N.Y.	84	87	92	84	82	82	75	73	68	69	74	86
N.J.	114	117	110	106	96	86	83	80	76	90	99	100
Pa.	102	101	93	97	94	91	85	83	81	83	94	96
Ohio	105	104	106	104	100	95	90	86	84	86	95	103
Ind.	124	116	116	112	103	99	96	90	90	89	99	106
Ill.	118	125	123	120	117	113	105	101	98	97	106	113
Mich.	85	81	81	80	74	72	70	67	63	65	77	82
Wis.	83	83	84	79	80	75	69	68	62	66	78	83
Minn.	100	102	96	95	91	89	85	81	79	80	91	102
Iowa	142	143	145	140	136	126	122	114	110	108	115	134
Mo.	134	133	133	124	118	113	105	101	102	105	121	126
N.D.	74	74	73	73	71	71	68	65	59	66	67	76
S.D.	108	110	113	106	102	94	88	81	79	87	92	100
Nebr.	114	115	112	105	104	96	91	88	85	88	90	102
Kans.	142	138	142	132	131	121	116	109	112	112	119	131
Del.	160	160	160	157	140	121	112	100	98	123	130	143
Md.	110	108	108	106	98	95	90	87	81	82	89	108
Va.	75	78	80	74	69	68	64	62	65	66	68	77
W.Va.	79	75	77	73	68	67	65	64	62	60	68	74
N.C.	50	50	51	49	47	45	42	42	40	43	46	49
S.C.	48	50	48	48	45	42	39	36	39	40	42	45
Ga.	51	52	53	52	47	45	44	42	40	42	46	46
Fla.	56	60	60	53	49	48	48	48	47	50	55	58
Ky.	77	72	69	67	62	56	55	49	51	53	61	66
Tenn.	72	72	68	65	61	57	55	54	56	58	66	69
Ala.	48	53	55	51	47	47	45	45	44	45	45	49
Miss.	46	51	48	43	42	42	41	41	39	42	44	47
Ark.	54	53	50	48	44	44	43	41	43	46	48	52
La.	60	59	58	57	53	52	50	50	50	53	57	59
Okl.	97	94	91	88	84	80	73	72	75	77	83	98
Tex.	72	75	70	67	65	63	60	58	56	57	61	64
Mont.	62	66	64	61	61	58	54	52	49	52	55	60
Idaho	67	67	66	65	61	60	58	56	55	61	66	67
Wyo.	72	69	66	66	61	58	55	52	50	57	59	62
Colo.	75	74	76	74	72	68	66	64	65	65	68	72
N.Mex.	49	59	60	54	48	48	46	45	42	45	50	53
Ariz.	79	75	71	70	64	60	56	60	65	73	75	76
Utah	57	66	66	66	60	57	56	53	55	54	55	57
Nev.	62	65	65	63	62	60	59	54	58	50	55	58
Wash.	71	73	71	68	64	63	62	60	62	65	70	72
Oreg.	69	69	69	68	66	64	63	56	50	62	63	65
Calif.	70	70	69	63	63	62	61	60	63	65	67	68
U.S.	84.5	85.1	84.1	80.5	77.0	73.7	70.1	67.4	66.4	68.2	74.4	80.5



Table XXIX-b.

NUMBER OF

HENS AND PULLETS PER FARM FLOCK, 1926, BY STATES  
IN FLOCKS OF CROSSLING

State:	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	October	November	December
Me.	73	69	63	64	56	56	56	55	43	52	55	63
N.H.	76	75	70	62	61	60	54	44	41	49	55	64
Vt.	43	53	53	54	50	44	44	42	38	40	41	47
Mass.	76	81	75	76	70	70	70	70	70	65	70	76
R.I.	66	90	103	90	85	85	85	81	75	80	85	90
Conn.	74	73	80	73	75	73	72	70	70	64	67	70
N.Y.	90	85	84	84	82	80	78	75	69	70	81	85
N.J.	107	104	100	96	98	93	91	88	80	87	112	116
Pa.	104	99	101	101	95	95	83	85	81	86	93	99
Ohio	111	112	105	105	93	94	94	89	88	87	95	104
Ind.	112	115	113	112	105	97	93	89	88	88	95	107
Ill.	123	124	120	120	115	108	101	97	97	102	107	120
Mich.	87	85	84	83	79	78	75	68	65	68	71	81
Wis.	87	85	86	85	81	78	74	70	69	69	77	83
Minn.	102	104	97	95	92	87	86	84	76	82	85	99
Iowa	141	152	146	145	137	131	126	115	113	113	117	134
Mo.	129	135	141	131	124	120	116	109	100	112	117	120
N.D.	77	75	75	74	73	72	63	65	62	70	72	76
S.D.	105	109	107	106	103	94	91	81	84	89	91	102
Nebr.	105	110	108	108	97	94	94	87	89	91	98	106
Kans.	140	137	135	129	125	119	108	107	104	110	118	135
Del.	145	150	150	145	140	135	128	115	125	130	135	150
Md.	117	118	115	110	109	105	100	94	85	96	100	110
Va.	78	79	81	71	67	64	62	60	61	64	66	77
W.Va.	74	78	74	70	66	66	63	63	62	62	69	72
N.C.	50	50	48	45	42	41	40	37	41	44	47	51
S.C.	46	43	43	44	42	42	43	42	42	44	47	51
Ge.	47	46	44	45	42	41	42	40	41	43	46	48
Fla.	54	56	62	56	53	52	51	50	47	53	56	60
Ky.	69	73	71	63	62	56	55	53	53	57	65	72
Tenn.	73	75	75	67	59	53	51	51	52	62	67	72
Ala.	54	53	52	48	45	45	45	42	43	44	46	51
Miss.	50	50	49	47	45	44	43	42	40	44	47	49
Ark.	54	56	50	50	47	46	45	44	44	46	47	54
La.	57	57	56	55	55	55	55	53	54	54	57	60
Okla.	99	102	100	92	86	78	78	74	75	85	91	105
Tex.	67	67	66	62	60	59	57	56	58	65	69	76
Mont.	64	63	62	61	60	52	51	47	49	51	56	59
Idaho	71	75	69	66	66	62	57	61	66	67	68	72
Wyo.	64	66	62	62	60	58	57	55	52	57	62	69
Colo.	31	33	30	79	70	69	64	60	59	66	72	74
N.Mex.	55	58	55	51	50	48	45	38	43	52	55	55
Ariz.	75	80	75	70	67	65	64	55	50	55	60	66
Utah	60	64	61	57	56	53	53	55	57	59	65	75
Nevada	61	70	70	70	68	65	62	59	56	60	65	75
Wash.	75	70	66	64	65	63	60	59	54	64	72	75
Oreg.	67	66	65	66	63	61	56	57	58	60	64	67
Calif.	68	70	70	66	65	60	60	60	60	62	67	69
U.S.	84.3	85.2	83.5	80.8	76.6	73.4	71.0	67.9	66.9	70.8	75.6	83.2

Table XXIX-c.

NUMBER OF

## HENS AND PULLETS PER FARM FLOCK, 1927. BY STATES

State:	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	October	November	December
Me.	63	66	66	66	61	59	55	54	51	51	59	70
N.H.	63	70	72	71	62	60	60	60	56	60	62	70
Vt.	51	49	50	51	50	43	44	43	40	45	45	50
Mass.	72	70	71	70	69	65	65	60	65	60	73	80
R.I.	92	95	95	91	89	85	86	86	86	73	82	90
Conn.	73	73	75	78	75	72	70	70	67	65	70	77
N.Y.	90	90	90	83	83	80	81	78	74	72	82	86
N.J.	110	109	105	105	103	101	98	93	86	103	110	112
Pa.	109	101	106	107	98	94	89	87	83	88	96	105
Ohio	112	110	112	100	99	95	94	83	87	89	89	107
Ind.	122	123	120	116	100	103	97	92	91	94	100	106
Ill.	132	132	130	128	120	112	104	97	93	100	107	119
Mich.	92	90	89	85	83	79	72	69	63	70	77	92
Wis.	84	92	93	91	87	82	77	74	71	73	85	90
Minn.	102	105	104	103	98	93	88	85	86	84	91	99
Iowa	144	151	148	148	146	137	127	117	112	116	121	137
Mo.	141	144	144	143	128	125	116	110	110	114	123	132
N.D.	77	76	74	75	72	68	66	62	61	66	69	74
S.D.	110	112	113	110	108	99	89	87	83	90	94	110
Nebr.	114	116	110	108	102	98	91	90	90	90	97	107
Kans.	143	143	138	133	126	119	114	110	111	115	123	134
Del.	155	150	160	155	154	150	145	143	130	119	135	150
Md.	122	121	121	117	112	109	104	99	95	95	106	117
Va.	84	82	82	79	75	72	69	69	66	72	75	79
W.Va.	74	76	75	72	69	68	62	61	59	63	70	74
N.C.	53	55	51	50	47	45	44	43	43	47	50	55
S.C.	53	55	50	48	45	45	45	45	47	53	54	56
Ga.	52	46	45	46	45	44	44	42	44	46	40	52
Fla.	64	67	60	55	52	53	50	48	50	51	54	62
Ky.	81	82	81	79	72	64	55	57	60	69	72	79
Tenn.	75	81	80	77	66	61	60	58	63	70	77	81
Ala.	55	55	53	53	49	49	47	45	44	46	50	52
Miss.	54	54	53	52	47	46	45	44	45	50	51	52
Ark.	58	56	55	52	48	47	45	43	43	54	57	60
La.	69	67	65	62	56	53	52	50	54	55	55	55
Okla.	117	115	115	107	97	89	78	60	51	99	101	105
Tex.	76	80	76	76	71	68	69	72	74	78	81	85
Mont.	63	58	58	58	53	48	47	47	44	49	52	60
Idaho	76	73	73	77	70	66	63	61	65	67	72	78
Wyo.	72	71	68	66	63	61	56	51	54	56	61	71
Colo.	79	80	80	79	75	69	69	65	65	70	73	78
N.Mex.	56	63	60	60	58	57	55	50	54	62	68	70
Ariz.	68	65	65	64	55	65	64	50	60	65	69	74
Utah	76	72	70	65	63	60	56	54	56	64	74	75
Nev.	76	75	75	71	62	58	57	60	65	75	80	85
Wash.	80	80	81	78	76	71	70	62	68	73	75	80
Oreg.	71	70	69	70	68	62	58	63	63	67	75	78
Calif.	72	75	79	80	71	67	64	62	65	68	72	81
U.S.	89.9	90.4	88.9	87.0	81.4	77.5	73.7	71.6	71.6	75.6	80.8	87.3

Table XXIX-d.

NUMBER OF

HENS AND PULLETS PER FARM FLOCK, 1928, BY STATES  
IN FLOCKS OF 500 OR MORE

State:	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	October	November	December
Me.	70	63	63	64	60	62	53	52	51	50	57	69
N.H.	77	72	71	70	65	60	59	57	63	65	66	70
Vt.	54	54	54	55	56	52	52	46	44	38	41	44
Mass.	60	60	60	70	60	77	72	68	65	63	70	74
R.I.	104	110	115	112	100	92	84	80	70	59	68	70
Conn.	82	82	84	81	76	74	71	69	64	65	72	79
N.Y.	90	90	85	83	80	79	75	72	69	75	81	85
N.J.	117	112	111	110	109	107	94	84	84	83	95	105
Pa.	115	111	107	104	96	92	89	85	80	85	91	99
Ohio	116	116	111	109	100	99	91	84	84	89	93	105
Ind.	115	118	114	112	107	100	97	92	91	93	101	109
Ill.	125	129	125	123	115	107	102	96	91	96	107	116
Mich.	95	91	91	90	86	79	74	63	65	66	79	80
Wis.	94	93	90	89	86	81	75	73	72	73	83	87
Minn.	100	103	97	96	96	89	86	80	77	84	86	96
Iowa	150	152	152	147	142	136	127	117	113	115	121	137
Mo.	144	143	140	137	126	116	112	105	99	107	116	126
N.D.	74	74	72	71	69	65	63	62	61	62	67	73
S.D.	114	110	108	108	105	98	94	88	87	93	97	107
Nebr.	114	114	110	109	101	95	94	91	85	90	95	105
Kans.	138	141	138	132	123	119	114	112	110	111	119	131
Del.	158	176	175	172	162	152	145	136	111	101	125	141
Md.	116	117	110	104	100	97	93	88	89	83	96	111
Va.	84	87	83	81	75	70	66	64	64	69	70	77
W.Va.	79	79	79	74	72	69	67	64	61	66	67	70
N.C.	59	60	56	55	49	46	45	45	44	46	47	50
S.C.	56	59	56	55	50	48	45	44	45	43	49	48
Ga.	56	53	51	50	46	46	45	45	45	44	47	47
Fla.	65	58	56	54	53	52	50	49	51	52	53	55
Ky.	83	84	80	74	67	60	58	54	54	60	61	65
Tenn.	82	84	82	74	66	60	59	55	58	61	61	67
Ala.	56	57	53	51	46	45	44	43	41	42	42	46
Miss.	54	56	54	52	45	46	45	44	43	46	45	46
Ark.	63	66	55	51	50	48	47	44	46	43	51	53
La.	55	60	60	60	56	53	49	45	51	55	56	55
Okla.	115	114	104	102	90	85	82	81	81	89	94	104
Tex.	83	95	84	82	76	74	70	68	72	74	77	80
Mont.	64	64	63	63	63	60	60	55	48	52	60	65
Idaho	85	82	81	79	75	72	64	65	69	72	75	78
Wyo.	81	78	75	73	70	64	60	58	59	61	63	65
Colo.	85	85	85	85	81	76	72	65	65	67	74	78
N.Mex.	76	73	69	70	65	64	58	55	54	56	60	68
Ark.	76	80	71	66	60	55	52	45	55	60	65	68
Utah	76	76	75	70	70	65	59	60	61	58	60	64
Nev.	88	90	90	84	80	85	80	70	61	70	80	86
Wash.	76	75	75	75	69	66	63	60	56	63	64	65
Oreg.	84	78	75	73	71	68	65	64	63	68	73	75
Calif.	81	78	75	71	70	68	65	62	60	59	60	63
U.S.	92.1	93.0	89.1	86.6	81.1	77.0	73.6	70.1	69.2	72.2	77.0	82.3



HENS AND PULLETS PER FARM FLOCK, 1929, BY STATES  
IN FLOCK OF 50 OR MORE

State:	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	October	November	December
Mo.	69	63	66	65	60	57	52	50	49	56	64	70
N.H.	70	70	66	66	60	57	55	55	50	52	60	76
Vt.	53	49	49	53	51	48	45	42	42	40	46	55
Mass.	82	79	80	76	72	68	65	60	67	73	79	87
R.I.	75	80	80	75	72	65	61	55	50	63	72	86
Conn.	78	74	75	75	71	65	63	64	72	70	75	80
N.Y.	91	89	88	83	83	80	75	72	72	74	87	90
N.J.	116	103	104	104	98	98	95	83	78	87	90	98
Pa.	105	107	103	102	94	90	86	83	79	86	96	107
Ohio	111	110	107	106	101	94	89	85	83	85	99	106
Ind.	115	114	108	108	104	98	93	87	86	87	105	114
Ill.	123	121	122	120	115	108	99	94	89	92	103	112
Mich.	87	86	83	79	73	75	69	67	66	64	75	80
Wis.	92	91	91	89	87	78	77	73	70	74	84	92
Minn.	103	102	101	99	95	89	83	82	76	81	87	104
Iowa	150	150	146	145	141	134	127	117	110	113	121	138
Ho.	135	132	127	126	118	117	109	101	97	106	123	131
N.D.	74	76	75	73	69	66	63	60	58	61	69	75
S.D.	115	117	116	115	109	101	95	92	90	87	102	113
Nebr.	111	108	108	110	106	95	90	87	83	83	97	106
Kans.	139	142	135	133	125	124	120	107	99	111	120	131
Del.	150	140	133	129	129	127	125	125	127	131	140	155
Md.	112	117	114	108	107	100	96	97	95	95	104	110
Va.	31	78	78	75	72	69	64	65	62	67	72	76
W.Va.	77	72	70	69	64	63	58	59	59	64	68	72
N.C.	53	50	47	45	41	41	33	40	41	46	48	50
S.C.	48	49	52	48	42	41	39	41	43	42	46	49
Ge.	48	45	44	42	41	39	39	39	38	43	44	51
Fla.	59	55	55	57	50	48	47	48	50	50	57	56
Ky.	69	68	66	66	54	51	58	58	51	52	57	66
Tenn.	74	71	70	66	56	53	52	52	51	55	60	68
Ala.	52	48	44	45	42	41	40	43	44	45	46	48
Miss.	50	46	43	42	42	41	41	41	41	42	44	46
Ark.	55	54	52	51	48	48	46	44	44	47	48	52
La.	54	54	51	47	46	45	44	46	48	53	54	55
Okla.	113	111	105	97	88	82	78	75	78	85	95	104
Tex.	82	82	82	82	73	70	69	69	71	77	79	84
Mont.	66	70	65	65	62	58	52	51	51	51	55	66
Idaho	79	79	80	75	75	70	70	70	68	66	69	75
Wyo.	70	70	68	64	59	58	54	58	57	61	64	65
Colo.	85	83	82	75	75	68	70	71	69	70	75	78
N.Mex.	75	78	70	65	65	60	55	51	50	49	57	62
Ariz.	70	72	68	69	65	61	50	51	57	62	65	70
Utah	70	70	70	66	60	58	52	54	55	60	68	71
Nev.	95	100	100	100	80	80	75	74	70	76	80	88
Wash.	67	68	70	69	68	64	62	61	61	67	68	80
Oreg.	83	79	73	75	75	71	65	66	62	68	70	75
Calif.	65	65	65	63	61	58	55	56	55	57	60	62
U.S.	87.5	86.1	84.0	82.1	77.4	73.8	70.3	68.3	66.9	70.6	77.7	84.4

NUMBER OF YOUNG CHICKENS IN FARM FLOCKS, IN THE UNITED STATES AND  
GRAND DIVISIONS? JUNE TO OCTOBER, 1927 - 1930

This summary of reports on numbers of chicks per flock shows by Grand Divisions, numbers reported for the different months since the inception of the inquiry. The numbers shown are derived from the state averages of the actual numbers reported by correspondents reighted by the number of farms keeping chickens as reported by the U.S. Census of 1925. Reports are obtained from correspondents for numbers on the first day of the months of April, May, June, July and October. Owing to the effect of relative earliness of the season the numbers reported in April signify little as to ultimate totals. The May indications are better but still doubtful. The June reports, after hatchings are mostly finished, and the heaviest losses of young chicks are over, and before marketings have become heavy, give very good indications, to be checked later by those for July and October, which when taken as evidence of production needs to be considered in connection with the evidence of summer and early fall marketings.

In order to avoid the disturbing influence of large flocks on the averages all returns were excluded in which the number of hens and pullets of laying age was equivalent to 400 or more on January 1, and also all showing over 500 chicks and young chickens where the number of young birds was as much as five fold greater than the number of hens and pullets of laying age.

These figures are representative of changes and relative numbers of young birds in flocks of crop reporters numbering less than 400 hens and pullets of laying age on January 1. The figures are probably higher than the average for all farms, but are comparable for successive months and years. Numbers shown for southern states are relatively too high, compared with other sections. Returns for small states are less dependable owing to the smaller sample.

The state averages are the actual averages reported, i. e., total number of young divided by the total number of flocks. October 1929 and 1930 are omitted because a change in the schedule of inquiry made figures not comparable with previous years.

The figures given for geographic divisions and for the United States as a whole, differ somewhat from those previously accepted and published which were estimated partly from numbers of young reported per farm, and partly from the relative numbers of young birds to hens and pullets of laying age in the two years, multiplied by the percentage of increase or decrease in hens and pullets compared with the previous year. The previously published estimates for the U.S. are shown at the bottom of Table XXX.

Table XXX.      AVERAGE NUMBER OF CHICKS AND YOUNG CHICKENS ON HAND IN  
FARM FLOCKS JUNE 1, JULY 1, AND OCTOBER 1, 1927 to 1930  
BY GRAND DIVISIONS

Geographic Division	Number per farm in				Number per farm in				Number per farm	
	June				July				in October	
	1927	1928	1929	1930	1927	1928	1929	1930	1927	1928
New England	78.7	100.0	95.3	107.9	100.1	99.1	93.2	114.6	70.3	68.9
Middle Atlantic	117.8	115.8	127.6	143.7	137.0	123.0	138.3	144.7	94.1	82.5
East North Central	180.9	157.2	175.3	180.1	182.0	164.9	189.3	182.1	119.2	108.2
West North Central	209.5	188.3	204.9	220.5	213.8	202.8	231.4	221.0	144.5	140.2
South Atlantic	116.1	106.7	106.0	112.4	117.8	104.4	108.1	104.3	70.2	60.0
South Central	131.4	119.4	122.0	125.3	128.0	110.1	113.8	116.5	76.4	67.7
Rocky Mountain	32.3	86.3	86.3	109.1	112.3	112.0	116.7	111.1	74.3	70.9
Western	92.2	84.3	91.5	103.1	105.3	89.6	88.9	100.3	60.2	49.6
United States	147.0	133.5	141.2	149.7	150.1	135.7	148.0	146.2	95.7	87.3

The published estimates for the U.S. of numbers per flock on farms of crop reporters, have been as follows:

United States:	:142.	131	139	147	148	136	148	147	96	86
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Table XXXa

AVERAGE NUMBER OF CHICKS AND YOUNG CHICKENS ON HAND IN FARM FLOCKS  
JUNE 1, JULY 1, and OCTOBER 1, 1927 to 1930, BY STATES

State	: Number per farm in June				: Number per farm in July				: Number per farm in Oct.	
	1927	1928	1929	1930	1927	1928	1929	1930	1927	1928
Me.	102	103	112	118	70	98	100	115	72	62
N.H.	44	68	67	86	106	103	124	115	77	53
Vt.	66	58	64	65	71	70	85	79	56	48
Mass.	89	136	112	126	159	122	78	150	77	90
R.I.	62	160	58	137	127	81	30	106	113	78
Conn.	65	109	104	125	103	103	88	108	63	88
N.Y.	75	80	97	100	112	97	105	115	68	65
N.J.	149	180	145	214	193	150	177	249	143	117
Pa.	151	138	152	172	151	142	162	156	110	93
Ohio	185	164	166	200	131	163	194	178	117	101
Ind.	226	133	225	213	218	190	217	212	140	121.3
Ill.	238	210	216	220	235	220	238	222	150	147
Mich.	107	93	111	103	128	109	136	134	87	76
Wis.	130	119	122	141	133	128	145	154	94	88
Minn.	141	131	140	153	168	156	177	171	112	109
Iowa	265	233	239	275	277	247	293	277	196	180
Mo.	250	208	239	232	221	205	238	218	142	133
N.D.	78	78	82	97	114	104	125	117	82	86
S.D.	160	161	172	179	179	202	220	204	143	148
Nebr.	203	185	204	236	215	203	238	244	142	152
Kansas	234	225	248	266	228	232	246	242	146	144
Del.	237	377	233	440	197	275	390	227	154	175
Md.	211	168	187	193	217	130	196	193	129	128
Va.	133	123	136	132	139	123	133	138	89	78
W.Va.	107	89	90	96	115	109	98	105	77	64
N.C.	104	98	95	100	101	92	92	84	67	56
S.C.	113	107	103	113	111	98	98	99	60	52
Ga.	99	92	87	92	104	91	91	86	50	40
Fla.	103	71	70	75	103	63	81	71	55	33
Ky.	151	123	133	135	143	121	135	129	93	101
Tenn.	146	118	117	120	136	109	107	113	81	63
Ala.	104	88	91	96	99	80	81	83	47	41
Miss.	96	96	91	96	94	82	80	84	43	43
Ark.	100	104	100	93	93	88	81	91	57	49
La.	92	105	88	98	100	91	94	98	58	58
Okla.	196	138	204	196	210	182	190	188	128	108
Tex.	142	138	135	143	136	89	119	112	128	100
Mont.	60	82	71	82	89	112	128	100	129	104
Idaho	105	86	100	109	135	106	114	111	82	74
Wyo.	82	86	65	110	101	117	98	109	79	84
Colo.	103	114	106	122	131	135	174	136	84	82
N.Mex.	87	76	78	80	111	102	90	93	71	57
Ariz.	84	61	69	67	123	74	34	68	50	59
Utah	111	51	78	180	84	85	92	105	51	47
Nev.	90	72	60	94	74	133	73	93	73	72
Wash.	95	95	98	110	122	94	113	113	73	57
Oreg.	105	87	108	114	118	81	103	134	60	49
Calif.	84	76	79	93	88	91	66	75	52	45
U. S.	147.0	133.5	141.2	149.7	150.1	135.7	140.0	143.2	95.7	87.3



Table XXXI.

SOURCE OF CHICKENS RAISED AS REPORTED BY CROP  
CORRESPONDENTS FOR THEIR LOCALITIES.  
By Geographic Divisions

Geographic division	Proportion of chickens raised that are hatched under hens	Hatched in incubators on farm where raised	Hatched for fee from eggs supplied by grower (custom hatched)	Bought as baby chicks
	P.ct.	P.ct.	P.ct.	P.ct.
North Atlantic	26.5	17.8	10.7	45.0
North Central	32.6	30.9	11.3	25.2
South Atlantic	68.4	12.7	7.1	11.8
South Central	63.2	20.1	7.5	9.2
Western	35.0	17.4	6.4	41.2
United States	42.9	24.2	9.6	23.4

SOURCE OF CHICKENS RAISED  
As reported by crop correspondents

About 43% of all chickens raised are still hatched under hens, according to reports from crop correspondents to the United States Department of Agriculture. About 24% of them are hatched in incubators on the farm where they are raised, and about 10% are hatched for a fee (custom hatched) from eggs supplied by the grower. About 23% are bought as baby chicks. Only in the South does Biddy still hold her own over the artificial incubator. Two-thirds of the chicks raised there, and almost four-fifths in the South Atlantic and Gulf States are hatched and hovered under the brooding warmth of the mother hen. In the North and West only about a third are so hatched, and in the North Atlantic States only a fourth.

The proportion of chickens reported as hatched in farm incubators is highest, about 31%, in the North Central States. In this area the proportion so incubated increases westerly from 17 in Michigan and 19 in Ohio to 40 in Missouri and Kansas. Oklahoma also, in the South Central group of states, shows 40% so incubated on the farm against a range of 9% to 21% for the rest of the states in that group and an average for the group of 20%. The figure drops to 18% in the North Atlantic and Western States and 13% average in the South Atlantic group. The proportion custom-hatched is about 11% in the North Central and North Atlantic States; about 7% in the South and 6% in the West.

45% of the chickens raised in the North Atlantic States and 41% in the West are bought by growers as baby chicks. The North Central States buy about 25% of their supply and the South about 10% of their supply of chicks raised.

The state estimates are based upon two independent groups of estimates, one received through the field Statisticians in the different states and one from men reporting direct to Washington. The two sets of figures for each state are in close agreement in most instances.

SOURCE OF CHICKENS RAISED AS REPORTED BY GROUP  
CORRESPONDENTS FOR THEIR LOCALITIES.

By States

State	Proportion of chickens raised that are hatched under hens	Hatched in incubators on farm where raised	Hatched for fee from eggs sup- plied by grower (custom hatched)	Bought as baby chicks
	P. ct.	P. ct.	P. ct.	P. ct.
Me.	34	26	7	33
N.H.	22	25	5	48
Vt.	41	19	4	36
Mass.	22	24	5	49
R.I.	14	16	7	63
Conn.	22	21	10	47
N.Y.	28	15	9	48
N.J.	20	18	19	43
Pa.	28	16	13	43
Ohio	29	19	13	39
Ind.	23	29	13	30
Ill.	33	26	11	25
Mich.	31	17	8	44
Wis.	29	22	8	41
Minn.	32	32	10	26
Iowa	30	33	12	25
Mo.	36	40	10	14
N.Dak.	52	31	4	13
S.Dak.	40	38	5	17
Nebr.	36	36	13	15
Kans.	27	40	16	17
Del.	30	17	13	40
Md.	44	15	15	26
Va.	70	12	7	11
W.Va.	60	16	5	19
N.C.	75	12	6	7
S.C.	77	12	5	6
Ga.	78	10	5	7
Fla.	57	17	11	15
Ky.	73	16	4	7
Tenn.	77	13	4	6
Ala.	78	12	4	6
Miss.	80	9	6	5
Ark.	69	19	4	8
La.	79	10	3	8
Okla.	36	40	11	13
Tex.	53	21	13	13
Mont.	52	24	2	22
Idaho	35	18	9	38
Wyo.	41	28	7	24
Colo.	43	25	5	27
N.Mex.	55	21	2	22
Ariz.	33	10	3	54
Utah	28	9	9	54
Nev.	25	15	2	58
Wash.	30	20	6	44
Oreg.	32	19	9	40
Calif.	31	12	7	50
U.S.	42.9	24.2	9.6	23.4

MORTALITY OF CHICKENS

Geographic division	Loss from disease, vermin, accident, exposure, etc. in the locality, reported	
	Mature, i. e. on hand, Jan. 1, 1928	Young birds, i. e. hatched or bought, in 1928
	P.ct.	P.ct.
North Atlantic	8.8	21.3
North Central	9.7	26.7
South Atlantic	9.6	25.5
South Central	9.8	28.2
Western	9.8	19.2

MORTALITY OF CHICKENS

The loss of chickens on farms in 1928 from disease, vermin, accident, exposure, etc. is estimated by the crop correspondents of the Department of Agriculture at about one-tenth of the adult birds on hand January 1, 1928 and about one-fourth of young birds hatched or bought in 1928.

The reported loss is practically the same for mature birds in the North, South and West, ranging from 9.6 to 9.9%. But in the North Atlantic group of States it is only 8.8%.

The mortality of chickens is difficult to determine unless a record is kept. The loss of a hen is not always observed and even when noted, may soon be forgotten. It is probable that the estimates reported by correspondents are too conservative. Many reports for flocks of considerable size show no losses, or practically none, which may be true in the case of some well managed flocks, but not for average flocks. The few available figures from actual records agree pretty well on about 11 or 12% for loss of mature birds. Such records relate mainly to commercial flocks, however.

Losses in special poultry flocks are believed to run somewhat higher than in reasonably well managed regular farm flocks owing to the heavy feeding, and more or less artificial conditions to which the hens in specialized flocks are subjected, in the effort to produce maximum production of fall and winter eggs and to increase the total annual production. This loss is not adequately reflected in these figures, which represent mainly farm flocks. Proper allowance for this would probably increase the mortality rate in the North Atlantic and Pacific Coast States where a large proportion of the chickens are in specialized commercial flocks.

\*The reported loss of young birds is also quite uniform, from 20 to 28% in the North and South, but only 21% in the North Atlantic, and 19% in the Western States.



Table XXXIII.

MORTALITY OF CHICKENS  
As Estimated by Crop Reporters

State	Loss from disease, vermin, accident, exposure, etc. in the locality		State	Loss from disease, vermin, accident, exposure, etc. in the locality	
	Mature, i. e. on hand, Jan. 1, 1928	Young birds, i.e.hatched or bought, in 1928		Mature, i.e.on hand, Jan.1, 1928	Young birds,i. e. hatched or bought, in 1928
	P. ct.	P. ct.		P. ct.	P. ct.
Me.	6	14	Ky.	9	29
N.H.	8	22	Tenn.	9	25
Vt.	8	17	Ala.	8	25
Mass.	9	19	Miss.	10	25
R.I.	12	22	Ark.	9	26
Conn.	11	20	La.	12	29
N.Y.	8	18	Okls.	10	32
N.J.	11	25	Tex.	11	30
Pa.	9	25	Mont.	8	21
Ohio	9	26	Idaho	10	22
Ind.	9	25	Wyo.	10	22
Ill.	10	29	Colo.	9	23
Mich.	9	22	N.Mex.	9	24
Wis.	9	24	Ariz.	8	25
Minn.	10	24	Utah	8	20
Iowa	10	29	Nev.	8	20
Mo.	10	29	Wash.	9	18
N.Dak.	10	25	Oreg.	10	21
S.Dak.	11	30	Calif.	11	16
Nebr.	10	26	U. S.	9.7	25.8
Kans.	10	26			
Del.	8	20			
Md.	11	25			
Va.	9	25			
W.Va.	8	24			
N.C.	10	25			
S.C.	9	24			
Ga.	10	29			
Fla.	12	28			

## TYPES OF CHICKENS IN FARM FLOCKS IN THE UNITED STATES.

The proportion of heavy and light breeds of chickens in the United States is about the same, according to the judgment of crop correspondents of the United States Department of Agriculture reporting for their respective localities. Birds of heavy breeding are reported to comprise 42.5 per cent, and those of light breeding 41.6 per cent, of the United States total, with 15.9 per cent made up of birds of mixed breeding.

Of the heavy types of chickens, the proportion of Plymouth Rocks and Rhode Island Reds is almost exactly equal, 17.3 per cent and 17.2 per cent of the total, with 8 per cent of other unclassified heavy types. The light type is composed mainly of Leghorns which are 37.0 per cent of all chickens, with only 4.6 per cent of other birds of light weight breeding.

It will be seen that the number of Leghorns is greater than the combined numbers of its two nearest competitors, namely, the Plymouth Rock and the Rhode Island Red. The proportion of the different breeds of chickens varies greatly in the different sections of the country. The Leghorn makes up from 50 to 70 per cent of all chickens in the Middle Atlantic and the Pacific Coast States and in certain Rocky Mountain States, which specialize in commercial egg production. The Leghorn also makes up from 25 to 45 per cent of the chickens in most of the Central States, and from 20 to 30 per cent in most of the Southern States from Virginia to Louisiana.

The Plymouth Rock is most in favor in the belt of states stretching north and south from Pennsylvania to Virginia and from Michigan to Tennessee and east and west from the Atlantic Ocean to the Mississippi River. In this entire area from 20 to 30 per cent of the chickens are of Plymouth Rock breeding. In most other areas the Plymouth Rock makes up from 15 to 20 per cent of the holdings, but in the highly specialized egg producing areas of the far West and in the North Atlantic States as far south as New Jersey, it comprises only from 5 to 15 per cent of all. The Rhode Island Red is not favored in New England where 50 per cent of the chickens are of this breeding. It is about 25 per cent of all in the Rocky Mountain States and between 15 and 20 per cent in the rest of the country, excepting in the highly commercialized egg areas of the Middle Atlantic and far Western States, where it comprises from 10 to 15 per cent of all chickens.

Table XXXIII. TYPES OF CHICKENS IN FARM FLOCKS IN THE UNITED STATES.

Percentages of chickens of different breeding, as reported for their localities by crop correspondents on February 1, 1930.

State	Number of Reports	Leghorn: P.ct.	Other: Light- weight: P.ct.	Total: Light- weight: P.ct.	Plymouth: Rock P.ct.	Rhode Island : Red P.ct.	Other: Heavy- weight: P.ct.	Total: Heavy- weight: P.ct.	Mixed Brooding P.ct.
Me.	179	9	2	11	22	51	3	76	13
N.H.	66	8	1	9	8	70	4	82	9
Vt.	122	28	4	32	12	36	5	53	15
Mass.	105	13	1	14	13	61	2	76	10
R.I.	21	20	5	25	16	43	3	62	13
Conn.	92	40	1	41	10	33	4	47	12
N.Y.	710	62	3	65	10	13	3	26	9
N.J.	80	50	3	53	15	8	9	32	15
Pa.	868	46	4	50	18	13	5	36	14
Ohio	727	46	4	50	20	13	7	40	10
Ind.	670	32	4	36	25	17	9	51	13
Ill.	510	24	5	29	26	17	13	56	15
Mich.	783	47	3	50	24	9	4	37	13
Wis.	872	46	5	51	15	12	7	34	15
Minn.	646	39	6	45	15	15	9	39	16
Iowa	904	28	5	33	17	19	15	51	16
Mo.	624	38	6	44	16	17	10	43	13
N.D.	591	17	6	23	24	17	12	53	24
S.D.	526	22	5	27	19	19	16	54	19
Nebr.	418	25	4	29	15	22	17	54	17
Kans.	544	40	5	45	13	18	11	42	13
Del.	16	53	1	54	32	7	3	42	4
Md.	123	34	4	38	26	17	3	46	16
Va.	452	26	5	31	26	19	5	50	19
W.Va.	299	34	6	40	17	18	4	39	21
N.C.	486	19	7	26	22	21	6	49	25
S.C.	213	19	6	25	16	27	6	49	26
Ga.	424	21	6	27	17	21	6	44	29
Fla.	78	45	5	50	8	20	3	31	19
Ky.	594	20	6	26	28	17	8	53	21
Tenn.	532	22	6	28	25	17	8	50	22
Ala.	284	29	7	36	15	17	4	36	28
Miss.	377	25	5	30	15	25	5	45	25
Ark.	333	32	6	38	17	15	6	38	24
La.	123	24	6	30	13	19	4	36	34
Okla.	655	39	4	43	14	21	7	42	15
Tex.	676	44	5	49	11	18	4	33	18
Mont.	306	24	3	27	18	24	9	51	22
Idaho	183	56	3	59	11	17	4	32	9
Wyo.	110	29	4	33	14	26	9	49	18
Colo.	347	39	4	43	11	23	8	42	15
N.Mex.	80	41	6	47	10	25	5	40	13
Ariz.	42	61	5	66	9	12	1	22	12
Utah	98	64	2	66	10	7	3	20	14
Nev.	29	59	2	61	13	9	5	27	12
Wash.	314	68	2	70	7	12	3	22	8
Oreg.	294	60	3	63	12	13	2	27	10
Calif.	331	70	1	71	6	13	2	21	8
U. S.	17,862	37.0	4.6	41.6	17.3	17.2	8.0	42.5	15.9



## PRODUCTION OF EGGS IN THE UNITED STATES

Egg production for human consumption is practically limited to chicken eggs. The number of other poultry than chickens is only about 3 per cent of all poultry layings per bird are much fewer with other poultry than with chickens, as a rule, and a much larger proportion of the eggs laid by these other classes of poultry are used for hatching. Considerable quantities of duck eggs come into a few markets at certain seasons, but eggs from geese, turkeys, and other kinds of poultry are rarely seen in the ordinary channels of the egg trade. Egg production by chickens probably amounts to 98 per cent or 99 per cent of the total. The proportion of other eggs being so small no special account is taken of them. The uncertainty as to actual total numbers of eggs laid, which renders any estimate subject to a wide margin of error, makes the inclusion or exclusion of the relatively few eggs of other poultry with those of chickens in these tables of no practical importance. The estimates given in Table XXXIV are considerably higher than those shown by the Census for 1924. The reasons for the increase are mentioned in the paragraphs following and are discussed at length in the study on production and consumption of eggs appearing in Part I of this paper.

Table XXXIV. EGGS: Estimated Farm Production and Value, 1924-1928.

Estimated numbers laid in 1924 are based primarily upon farmers estimates of eggs produced as reported to enumerators in January, 1925, plus an increase varying in different states to allow for apparent incompleteness in the enumeration and for under-estimate by the farmer due to memory bias. These allowances amount in all to an increase of about 20 per cent for the U. S. This allowance represents the minimum increase needed to provide for the apparent consumption of domestic eggs in this country on the basis of studies of consumption on and off farms, movement of eggs in commercial channels, and city receipts.

The increases made are smallest, mostly 5 to 15 per cent, in the North Atlantic and Pacific Coast States, where the proportion of commercial flocks is highest, and receipts from eggs are more of a major item in the farm income; it is largest, from 15 per cent up to about 45 per cent, in the Southern States, where chickens are more of an incidental item in the farm program, and are raised more for meat than for eggs, and where least attention would be given and the fewest records kept of egg production. In the Central States where eggs are a more material item in the farm income, but not on most farms a major item, the allowance ranges from about 15 to 25 per cent. The bases for the adjustments in the individual states were not very satisfactory and these estimates may require revision when more information becomes available.

Number of eggs laid in 1925 estimated on basis of relative number of layers, 1924 and 1925, and relative receipts and commercial movement of eggs in the two years; 1926-1928 based upon relative numbers of layers and relative layings per hen, as reported by the crop correspondents annually and monthly during the years 1925-1928.

The trend of layings is shown graphically for the U. S. as a whole in Figure 14, giving the eggs laid per farm flock in the U. S. on the first day of each month, 1925-1928, as reported by crop correspondents for their own flocks.

Table XXXIV. EGGS: Estimated Farm Production and Value 1924 - 1928  
By Geographic Divisions

Geographic Division	Number of eggs laid (Millions)					
	1924	1925	1926	1927	1928	1929
North Atlantic	3,660	3,954	4,088	4,300	4,305	4,415
North Central	14,172	14,413	15,467	15,853	15,960	15,960
South Atlantic	2,385	2,436	2,538	2,758	2,708	2,464
South Central	4,386	4,550	4,996	5,387	5,115	4,806
Western	3,025	3,151	3,466	3,702	4,032	4,096
United States	27,628	28,504	30,555	32,000	32,120	31,741
	Farm Price of Eggs per Dozen.					
	1924	1925	1926	1927	1928	1929
North Atlantic	34.5	39.0	37.5	34.1	36.7	39.4
North Central	24.8	28.3	26.9	22.9	26.7	27.8
South Atlantic	28.3	31.6	31.7	27.7	29.7	31.8
South Central	23.2	27.2	26.2	22.0	25.1	26.2
Western	28.0	33.3	29.4	26.5	27.6	30.5
United States	26.5	30.4	28.9	25.1	28.2	29.9
	Total Value of Eggs Produced on Farms (thousands of dollars)					
	1924	1925	1926	1927	1928	1929
North Atlantic	105,348	128,558	127,922	122,243	131,725	144,679
North Central	292,868	339,834	346,507	302,449	355,408	370,763
South Atlantic	56,225	64,145	67,197	63,679	67,093	65,248
South Central	94,925	102,925	108,875	98,989	107,080	104,787
Western	70,682	87,463	84,822	81,574	92,774	104,118
United States	610,048	722,925	735,323	668,934	754,080	789,595

Table XXXIV-a.

EGGS:- ESTIMATED FARM PRODUCTION AND  
VALUE 1924 - 1929  
By States.

State :	Number of eggs laid (millions) 1/					
	1924	1925	1926	1927	1928	1929
Me.	198	197	191	192	200	197
N.H.	110	119	114	121	138	133
Vt.	85	88	85	88	92	87
Mass.	190	207	218	212	218	220
R. I.	29	32	34	37	39	40
Conn.	156	171	186	198	208	234
N.Y.	1,197	1,308	1,282	1,361	1,348	1,386
N.J.	347	380	402	419	411	415
Pa.	1,348	1,452	1,576	1,672	1,651	1,703
Ohio	1,537	1,689	1,853	1,970	1,899	1,929
Ind.	1,279	1,259	1,312	1,358	1,347	1,340
Ill.	1,615	1,603	1,733	1,754	1,773	1,814
Mich.	938	966	1,039	1,114	1,143	1,174
Wis.	909	928	991	1,056	1,084	1,093
Minn.	1,098	1,144	1,136	1,148	1,140	1,209
Iowa	1,921	1,839	2,030	2,043	2,104	2,062
Mo.	1,879	1,922	2,159	2,175	2,090	2,007
N.Dak.	300	338	347	323	334	328
S.Dak.	492	495	521	510	540	540
Nebr.	794	809	844	855	887	883
Kansas	1,380	1,416	1,502	1,547	1,614	1,581
Del.	90	90	90	98	96	93
Md.	285	286	306	337	320	319
Va.	602	599	635	713	709	663
W.Va.	336	334	346	365	366	347
N.C.	442	455	470	509	500	408
S.C.	184	193	194	207	197	174
Ga.	324	349	365	381	376	325
Fla.	122	130	132	148	144	135
Ky.	682	664	736	795	677	631
Tenn.	713	744	810	882	800	709
Ala.	333	354	381	398	357	336
Miss.	291	317	363	369	350	305
Ark.	421	435	483	508	467	451
La.	181	181	193	191	178	175
Okla.	727	778	872	929	903	885
Texas	1,030	1,077	1,158	1,315	1,383	1,314
Mont.	215	195	211	187	221	227
Idaho	167	175	194	198	219	237
Wyo.	64	60	65	64	73	71
Colo.	280	274	299	300	322	350
N.Mex.	60	62	63	71	73	75
Ariz.	46	49	55	72	55	55
Utah	123	139	144	165	184	235
Nev.	19	20	23	24	26	28
Wash.	539	622	701	787	875	878
Oreg.	285	297	300	357	385	364
Calif.	1,227	1,258	1,411	1,477	1,599	1,576
U.S.	27,628	28,504	30,555	32,000	32,120	31,741

1/ Eggs not dozens



Table XXXIV-b

EGGS:- ESTIMATED FARM PRODUCTION AND  
VALUE 1924 - 1929

By States

State :	Farm value of eggs per dozen					
	1924	1925	1926	1927	1928	1929
	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Me.	36	39	39	37	39	42
N.H.	40	44	43	41	42	46
Vt.	32	39	38	36	37	39
Mass.	44	49	48	45	43	50
R.I.	46	49	47	44	45	49
Conn.	42	46	43	41	43	47
N.Y.	34	38	36	33	36	38
N.J.	39	43	41	37	40	43
Pa.	31	36	35	31	34	36
Ohio	28	32	30	25	30	32
Ind.	26	29	28	23	26	29
Ill.	26	29	28	24	27	29
Mich.	28	32	30	26	30	31
Wis.	26	29	28	25	28	29
Minn.	24	28	27	23	27	27
Iowa.	24	28	26	22	26	27
Mo.	23	27	25	22	25	26
N.Dak.	22	26	25	22	24	24
S.Dak.	22	26	25	21	25	25
Nebr.	22	25	25	20	24	25
Kans.	23	25	24	20	24	25
Del.	30	36	34	30	34	37
Md.	30	34	32	29	32	34
Va.	26	30	30	26	29	30
W.Va.	29	34	32	29	31	32
N.C.	28	31	32	28	28	31
S.C.	29	32	33	28	29	33
Ga.	28	28	31	26	29	31
Fla.	33	36	37	31	31	34
Ky.	24	28	27	23	27	28
Tenn.	23	27	26	22	25	27
Ala.	26	28	28	24	27	29
Miss.	27	28	26	23	26	28
Ark.	23	26	25	22	25	26
La.	27	30	29	25	28	28
Okla.	21	26	25	21	24	24
Tex.	22	27	26	21	24	25
Mont.	22	30	26	27	27	27
Idaho	24	30	27	25	25	27
Wyo.	27	32	30	28	28	30
Colo.	26	30	28	25	27	28
N.Mex.	29	31	31	26	29	31
Ariz.	35	40	37	34	35	40
Utah.	23	29	25	24	26	29
Nev.	34	39	32	29	29	31
Wash.	27	32	29	26	28	31
Oreg.	27	33	28	26	27	31
Calif.	31	36	31	27	28	32
U.S.	26.5	30.4	28.9	25.1	28.2	30.1

Table XXXIV-c.

EGGS:- ESTIMATED FARM PRODUCTION AND  
VALUE 1924 - 1929  
By States.

State :	Total value of eggs produced on farms (thousands of dollars) $\frac{1}{2}$					
	1924	1925	1926	1927	1928	1929
Me.	5,940	6,402	6,208	5,914	6,500	6,695
N.H.	3,663	4,367	4,031	4,138	4,830	5,094
Vt.	2,270	2,860	2,694	2,640	2,834	2,828
Mass.	6,973	8,446	8,720	7,950	7,804	9,174
R.I.	1,111	1,306	1,333	1,358	1,462	1,632
N.Y.	33,875	41,464	38,460	37,428	40,440	43,936
N.J.	11,278	13,604	13,748	12,905	13,686	14,857
Pa.	34,778	43,560	46,019	43,138	46,723	51,090
Ohio	36,511	45,096	46,325	40,976	47,475	51,504
Ind.	27,754	30,468	30,570	26,074	31,385	32,428
Ill.	35,046	38,914	40,379	35,080	40,005	43,899
Mich.	21,855	25,792	25,975	24,174	28,575	30,289
Wis.	19,725	22,458	23,090	21,965	25,257	26,451
Minn.	21,960	26,655	25,560	22,042	25,650	27,202
Iowa	38,420	42,849	44,051	37,387	45,657	46,395
Mo.	36,077	43,245	44,907	39,802	43,472	43,552
N.Dak.	5,490	7,335	7,218	5,911	6,680	6,560
S.Dak.	9,004	10,742	10,837	8,925	11,232	11,232
Nebr.	14,530	16,827	17,555	14,278	17,740	18,366
Kans.	26,493	29,453	30,040	25,335	32,280	32,885
Del.	2,250	2,700	2,547	2,450	2,717	2,864
Md.	7,125	8,094	8,170	8,155	8,544	9,028
Va.	13,063	14,975	15,875	15,472	17,158	16,575
W.Va.	8,131	9,452	9,238	8,833	9,443	9,265
N.C.	10,299	11,739	12,549	11,860	11,650	10,526
S.C.	4,453	5,153	5,335	4,323	4,767	4,785
Ga.	7,549	8,132	9,417	8,268	9,099	8,385
Fla.	3,355	3,900	4,066	3,818	3,715	3,820
Ky.	13,040	15,471	16,560	15,264	15,232	14,702
Tenn.	13,690	15,740	17,577	16,141	16,640	15,952
Ala.	7,226	8,248	8,877	7,960	8,032	8,131
Miss.	6,548	7,386	7,577	7,085	7,595	7,106
Ark.	8,083	9,440	10,046	9,296	9,714	9,787
La.	4,072	4,525	4,671	3,973	4,147	4,078
Okla.	12,722	16,883	18,138	16,258	18,060	17,700
Tex.	19,544	24,232	25,129	23,012	27,660	27,331
Mont.	3,934	4,875	4,579	4,208	4,972	5,108
Idaho	3,340	4,375	4,365	4,118	4,555	5,332
Wyo.	1,440	1,602	1,625	1,491	1,701	1,775
Colo.	6,076	6,850	6,967	6,240	7,245	8,155
N.Mex.	1,452	1,660	1,625	1,541	1,767	1,935
Ariz.	1,343	1,632	1,694	2,038	1,606	1,282
Utah	2,362	3,364	2,995	3,300	3,993	5,687
Nev.	538	650	614	581	629	722
Wash.	12,128	16,607	16,964	17,078	20,387	22,652
Oreg.	6,412	8,168	6,950	7,747	8,662	9,391
Calif.	31,657	37,740	36,404	33,232	37,257	42,079
U.S.	610,048	722,925	735,323	663,934	754,080	789,595
Conn.	5,460	6,549	6,659	6,772	7,446	9,173

$\frac{1}{2}$ /Value computed on price per egg.

Table XXXV    Estimated Production, Disposal, and Value of Chicken Eggs in the  
United States 1924-1929.

The basis of estimated production of eggs by states is explained under Table XXXIV. The number of eggs used for hatching is based upon an allowance of two eggs set for each chicken raised.

The consumption of eggs on farms in 1924 is estimated mainly on the basis of indicated number available for consumption per farm as computed from the farmers' estimates of number produced on farms, less number sold, according to the Census returns for 1909 and 1919, less estimated number needed for hatching; modified by evidence of farm consumption shown by quarterly reports of crop correspondents in 1922-1923 and in 1928, by special surveys on farm consumption, and by other available data as mentioned in the preceding discussion. The consumption per unit of farm population varies considerably in the different states. Changes in consumption years subsequent to 1924 are based upon the study of supply and price of eggs and the relative price of eggs and meat, and upon monthly reports of consumption by flock owners collected by extension specialists on poultry in a few states.

Number of eggs sold in 1924 was estimated tentatively from preliminary studies of commercial movements, city receipts, and various surveys of town and city consumption. The indications of urban consumption per person were studied in connection with those derived from the Census reports of eggs sold in 1909 and 1920 and a compromise figure reached on probable consumption by those not on chicken farms. This figures was combined with the estimated number of eggs used per person on farms to secure an indication of probable total production. On the basis of this total indicated production, the estimated production was increased over the Census production to a varying degree in different states, as explained under Table XXXIV. From these state totals of estimated production, less the estimated eggs required for hatching and for farm consumption, the estimates of eggs for sale in 1924 were derived.

Sales in 1925 are based upon the change from 1924 indicated by relative carlot movements and receipts of eggs in the principal markets in 1924 and 1925. Sales for 1926-1929 are based upon the estimated number of eggs laid less the estimated number required for hatching and for farm consumption.

Value per dozen is the monthly farm price as reported by prices correspondent weighted by monthly marketings.



Table XXXV

ESTIMATED PRODUCTION, DISPOSAL AND VALUE OF CHICKEN EGGS IN THE UNITED STATES  
1924 - 1929, BY GEOGRAPHIC DIVISIONS

Geographic division	Number of eggs (Millions)				Value per doz. (cents)	Total value (Thousands of dollars)		
	Laid	Used	Consumed	Sold ex-		Laid	Consumed	Sold
		for hatching	as food on farms	cept for hatching				
North Atlantic								
1924	3,660	119	674	2,870	34.6	105,348	19,413	82,560
1925	3,954	122	660	3,172	39.0	128,558	21,479	103,080
1926	4,088	125	634	3,330	37.6	127,922	19,877	104,149
1927	4,300	135	693	3,472	34.1	122,243	19,823	98,528
1928	4,305	123	646	3,535	36.7	131,725	19,971	108,114
1929	4,415	139	634	3,644	39.2	144,673	20,824	119,332
North Central								
1924	14,172	595	3,173	10,401	24.8	292,868	65,316	215,262
1925	14,413	621	3,111	10,681	28.3	339,834	73,067	252,199
1926	15,467	647	2,934	11,834	26.9	346,507	66,724	265,298
1927	15,853	676	3,235	11,912	22.9	302,449	62,133	227,496
1928	15,960	644	3,048	12,271	26.8	355,408	67,595	273,626
1929	15,960	718	2,984	12,257	23.0	370,763	68,806	285,379
South Atlantic								
1924	2,385	147	774	1,464	28.3	56,225	18,205	34,570
1925	2,436	150	759	1,526	31.9	64,145	19,691	40,534
1926	2,538	160	727	1,650	31.8	67,197	19,259	43,686
1927	2,758	171	796	1,792	27.8	63,679	18,258	41,525
1928	2,708	147	744	1,616	29.9	67,093	18,217	45,244
1929	2,464	157	727	1,579	31.9	65,248	19,132	41,956
South Central								
1924	4,386	248	1,245	2,291	23.2	84,925	35,922	44,136
1925	4,550	255	1,809	2,489	27.1	102,925	41,017	56,200
1926	4,996	279	1,734	2,984	26.2	108,875	37,834	64,919
1927	5,387	292	1,899	3,198	22.0	98,989	34,983	58,665
1928	5,115	254	1,773	3,090	25.1	107,080	37,253	64,532
1929	4,806	265	1,734	2,805	26.0	104,737	37,955	60,970
Western								
1924	3,025	92	636	2,299	28.3	70,682	14,394	54,189
1925	3,151	96	623	2,431	33.5	87,363	13,873	67,916
1926	3,466	106	597	2,763	29.5	84,822	14,359	67,882
1927	5,702	114	654	2,935	26.5	81,574	14,353	64,731
1928	4,032	103	611	3,321	28.0	92,774	13,989	77,489
1929	4,096	118	597	3,383	30.6	104,118	14,837	86,347
U.S. (1924)	27,628	1,201	7,102	19,325	26.8	610,048	153,250	430,717
1925	28,504	1,244	6,962	20,299	30.7	722,925	172,132	519,929
1926	30,555	1,317	6,676	22,561	29.0	735,323	158,103	545,934
1927	32,000	1,388	7,307	23,309	25.3	668,934	149,550	490,945
1928	32,120	1,271	6,822	24,033	28.4	754,080	153,845	569,005
1929	31,741	1,397	6,676	23,668	30.1	739,595	161,564	593,984

\* Farm price of eggs sold.

Table XXXVa  
U. S. DEPARTMENT OF AGRICULTURE  
Bureau of Agricultural Economics

ESTIMATED PRODUCTION, DISPOSAL AND VALUE OF CHICKEN EGGS - 1924

Number of eggs (Millions)					Value	Total value (thousands dollars)		
Used for					Sold except	Gross income		
Laid					per	Sold		
State		hatching	as food	for	doz.	Laid	Consumed	(cash income)
		on farms	hatching		cents		on farm	
Me.	198	6	40	152	36	5,940	1,200	4,560
N. H.	110	6	18	86	40	3,663	599	2,864
Vt.	85	3	25	57	32	2,370	568	1,522
Mass.	190	8	41	141	44	6,973	1,505	5,175
R. I.	29	1	5	23	46	1,111	192	881
Conn.	156	6	34	117	42	5,460	1,130	4,095
N. Y.	1,197	34	227	937	34	33,875	6,424	26,517
N. J.	347	12	46	289	39	11,278	1,495	9,392
Penna.	1,348	43	238	1,068	31	34,773	6,140	27,554
Ohio	1,567	59	305	1,202	28	36,511	7,106	28,007
Ind.	1,279	56	246	977	26	27,754	5,338	21,201
Ill.	1,615	70	360	1,185	26	35,046	7,812	25,714
Mich.	938	34	229	675	28	21,855	5,336	15,728
Wis.	909	31	252	626	26	19,725	5,468	13,584
Minn.	1,098	45	260	793	24	21,960	5,200	15,860
Iowa	1,921	82	384	1,455	24	38,420	7,680	29,100
Mo.	1,879	76	352	1,451	23	36,077	6,758	27,859
N. Dak.	300	12	136	151	22	5,490	2,489	2,763
S. Dak.	492	23	140	329	22	9,004	2,562	6,021
Nebr.	794	44	228	522	22	14,530	4,172	9,553
Kans.	1,380	63	281	1,035	23	26,496	5,395	19,872
Del.	90	3	11	75	30	2,350	275	1,875
Md.	285	13	49	223	30	7,125	1,225	5,575
Va.	602	35	162	405	26	13,063	3,515	8,788
W. Va.	336	12	87	238	29	8,131	2,105	5,760
N. C.	442	34	164	244	26	10,299	3,821	5,685
S. C.	184	17	102	65	29	4,453	2,468	1,573
Ga.	324	27	161	136	28	7,549	3,751	3,169
Fla.	122	6	38	78	33	3,355	1,045	2,145
Ky.	652	35	204	412	24	13,040	4,080	8,240
Tenn.	713	36	198	479	23	13,690	3,802	9,197
Ala.	333	21	165	147	26	7,225	3,580	3,190
Miss.	291	21	162	108	27	6,548	3,645	2,430
Ark.	421	22	184	215	23	8,083	3,533	4,128
La.	181	12	109	59	27	4,072	2,452	1,328
Okla.	727	43	239	395	21	12,722	5,058	6,912
Tex.	1,068	57	534	476	22	19,544	9,772	8,711
Mont.	215	7	78	131	22	3,934	1,427	2,397
Ida.	167	6	52	109	24	3,340	1,040	2,180
Wyo.	64	2	23	38	27	1,440	518	855
Colo.	280	11	92	177	26	6,076	1,996	3,841
N. Mex.	60	2	26	32	29	1,452	629	774
Ariz.	46	2	13	31	35	1,343	380	905
Utah	123	4	25	95	23	2,362	480	1,824
Nev.	19	1	6	13	34	538	170	368
Wash.	539	16	92	431	27	12,128	2,070	9,698
Oreg.	285	9	68	208	27	6,412	1,530	4,680
Calif.	1,227	32	161	1,034	31	31,657	4,154	26,667
U. S.	27,628	1,201	7,102	19,325	26.0	610,048	153,250	430,717

Table XXXVb  
U. S. DEPARTMENT OF AGRICULTURE  
BUREAU OF AGRICULTURAL ECONOMICS

ESTIMATED PRODUCTION, DISPOSAL AND VALUE OF CHICKEN EGGS - 1925								
Number of eggs (Millions)			Value			Total value (thousands of dollars)		
Used for			Consumed			Sold ex-		
Laid			per			Gross income		
Laid			hatch-			Consumed		
as food			cept for			Sold		
doz.			Laid			on farm		
State			ing			(cash income)		
			cents					
Me.	197	6	40	151	39	6,402	1,300	4,908
N. H.	119	6	18	95	44	4,367	661	3,486
Vt.	88	3	24	61	39	2,860	780	1,982
Mass.	207	8	40	159	49	8,446	1,632	6,487
R. I.	32	1	5	26	49	1,306	204	1,061
Conn.	171	6	33	132	46	6,549	1,264	5,056
N. Y.	1,308	34	222	1,051	38	41,464	7,037	33,317
N. J.	380	13	45	323	43	13,604	1,611	11,563
Penna.	1,452	45	233	1,174	36	43,560	6,990	35,220
Ohio	1,689	64	299	1,326	32	45,096	7,983	35,404
Ind.	1,259	57	341	961	29	30,468	5,832	23,256
Ill.	1,608	73	353	1,182	29	38,914	8,543	28,604
Mich.	966	36	325	705	32	25,792	6,008	18,824
Wis.	928	33	247	648	29	22,458	5,977	15,682
Minn.	1,144	47	255	842	38	26,655	5,941	19,619
Iowa	1,839	87	376	1,376	28	42,849	8,761	32,061
Mo.	1,922	81	345	1,496	27	43,245	7,762	33,660
N. Dak.	338	13	134	191	26	7,335	2,908	4,145
S. Dak.	495	24	137	334	26	10,742	2,973	7,248
Nebr.	809	43	223	543	25	16,827	4,638	11,294
Kans.	1,416	63	276	1,077	25	29,453	5,741	22,402
Del.	90	4	11	75	36	2,700	330	2,250
Md.	286	14	48	324	34	8,094	1,358	6,339
Va.	599	36	159	404	30	14,975	3,975	10,100
W. Va.	334	12	85	237	34	9,452	2,406	6,707
N. Car.	455	34	161	260	31	11,739	4,154	6,708
S. Car.	193	17	100	76	32	5,153	2,670	2,029
Ga.	349	27	157	164	28	8,132	3,658	3,821
Fla.	130	6	38	86	36	3,900	1,140	2,580
Ky.	664	38	300	427	28	15,471	4,660	9,949
Tenn.	744	38	194	512	27	16,740	4,335	11,520
Ala.	354	22	162	171	38	8,248	3,775	3,984
Miss.	317	22	159	136	28	7,386	3,705	3,169
Ark.	435	24	180	231	26	9,440	3,906	5,013
La.	181	12	107	62	30	4,525	2,675	1,550
Okla.	778	45	283	450	26	16,883	6,141	9,765
Tex.	1,077	54	534	500	27	24,232	11,790	11,250
Mont.	195	7	76	112	30	4,875	1,900	2,800
Ida.	175	6	51	118	30	4,375	1,275	2,950
Wyo.	60	2	23	35	32	1,602	614	934
Colo.	374	11	90	172	30	6,350	2,250	4,300
N. Mex.	62	2	25	34	31	1,600	645	877
Ariz.	49	2	13	34	40	1,632	433	1,132
Utah	139	4	24	111	29	3,364	581	2,686
Nev.	30	1	6	14	39	650	195	455
Wash.	622	18	90	514	32	16,607	2,403	13,724
Oreg.	297	9	67	221	33	8,168	1,843	6,078
Calif.	1,258	34	158	1,066	36	37,740	4,740	31,980
U. S.	28,504	1,244	6,962	20,293	30.7	722,925	173,132	519,929



Table XXXVc

U. S. DEPARTMENT OF AGRICULTURE  
Bureau of Agricultural Economics

## ESTIMATED PRODUCTION, DISPOSAL AND VALUE OF CHICKEN EGGS - 1926

State	Number of eggs (Millions)				Value per doz.	Total value (thousands of dollars)		
	Laid	Used for hatch- ing	Consumed as food on farms	Sold ex- cept for hatching		Gross income		
						Laid	Consumed on farm	Sold (cash income)
cents								
Me.	191	6	38	147	39	6,208	1,235	4,778
N. H.	114	6	17	91	43	4,081	609	3,258
Vt.	85	3	23	58	38	2,694	729	1,839
Mass.	218	8	39	172	48	8,720	1,560	6,880
R. I.	34	1	5	29	47	1,333	196	1,137
Conn.	186	6	32	148	43	6,659	1,146	5,298
N. Y.	1,282	35	213	1,034	36	38,460	6,390	31,020
N. J.	402	13	43	346	41	13,748	1,471	11,833
Penna.	1,576	47	224	1,305	35	46,019	6,541	38,106
Ohio	1,853	57	287	1,498	30	46,325	7,175	37,450
Ind.	1,312	60	231	1,020	28	30,570	5,382	23,766
Ill.	1,733	76	338	1,319	23	40,379	7,875	30,733
Mich.	1,039	39	216	785	30	25,975	5,400	19,625
Wis.	991	36	237	718	28	23,090	5,522	16,729
Minn.	1,136	48	245	843	27	25,560	5,512	18,968
Iowa	2,030	88	361	1,581	26	44,051	7,834	34,308
Mo.	2,159	86	331	1,742	25	44,907	6,885	36,234
N. Dak.	347	13	128	206	25	7,218	2,662	4,285
S. Dak.	521	24	132	365	25	10,837	2,746	7,592
Nebr.	844	45	214	585	25	17,555	4,451	12,168
Kans.	1,502	65	264	1,172	24	30,040	5,280	23,440
Del.	90	4	11	76	34	2,547	311	2,151
Md.	306	15	46	245	32	8,170	1,228	6,542
Va.	635	39	152	443	30	15,875	3,800	11,075
W. Va.	346	12	81	252	32	9,238	2,163	6,728
N. C.	470	36	154	280	32	12,549	4,112	7,476
S. C.	194	18	96	80	33	5,335	2,640	2,200
Ga.	365	29	151	185	31	9,417	3,896	4,773
Fla.	132	7	36	89	37	4,066	1,109	2,741
Ky.	736	41	192	504	27	16,560	4,320	11,340
Tenn.	810	40	186	584	26	17,577	4,036	12,673
Ala.	381	23	155	203	28	8,877	3,612	4,730
Miss.	363	24	152	187	26	7,877	3,298	4,058
Ark.	483	25	173	285	25	10,046	3,598	5,928
La.	193	14	102	76	29	4,671	2,468	1,839
Okl.	872	50	271	551	25	18,138	5,637	11,461
Tex.	1,158	62	503	594	26	25,129	10,915	12,890
Mont.	211	7	73	131	26	4,579	1,584	2,843
Ida.	194	7	49	138	27	4,365	1,102	3,105
Wyo.	65	3	22	40	30	1,625	550	1,000
Colo.	299	12	86	200	23	6,967	2,004	4,660
N. Mex.	63	3	24	36	31	1,625	619	929
Ariz.	55	2	12	41	37	1,694	370	1,263
Utah	144	4	23	117	25	2,995	478	2,434
Nev.	23	1	6	17	32	614	160	454
Wash.	701	20	87	594	29	16,964	2,105	14,375
Oreg.	300	10	64	226	28	6,990	1,491	5,266
Calif.	1,411	37	151	1,223	31	36,404	3,396	31,553
U. S.	30,555	1,317	6,676	22,561	29.0	735,323	158,103	545,934

Table XXXVd  
U. S. DEPARTMENT OF AGRICULTURE  
Bureau of Agricultural Economics

ESTIMATED PRODUCTION, DISPOSAL AND VALUE OF CHICKEN EGGS - 1927

State	Number of eggs (Millions)				Value per doz.	Total value (thousands of dollars)		
	Laid	Used for hatch- ing	Consumed as food on farms	Sold ex- cept for hatching		Laid	Gross income	
							Consumed on farm	Sold (cash income)
cents								
Me.	192	7	41	144	37	5,914	1,263	4,435
N. H.	121	6	19	96	41	4,138	650	3,283
Vt.	88	3	25	59	36	2,640	750	1,770
Mass.	212	8	42	162	45	7,950	1,575	6,075
R. I.	37	1	5	30	44	1,358	184	1,101
Conn.	198	8	35	156	41	6,772	1,197	5,335
N. Y.	1,361	36	234	1,091	33	37,428	6,435	30,002
N. J.	419	14	47	358	37	12,905	1,448	11,026
Pa.	1,672	52	245	1,376	31	43,138	6,321	35,501
Ohio	1,970	70	314	1,586	25	40,976	6,531	32,989
Ind.	1,358	65	253	1,040	23	26,074	4,858	19,968
Ill.	1,754	80	370	1,304	24	35,080	7,400	26,080
Mich.	1,114	42	236	835	26	24,174	5,121	18,120
Wis.	1,056	38	260	759	25	21,965	5,408	15,787
Minn.	1,148	48	268	832	23	22,042	5,146	15,974
Iowa	2,043	91	395	1,557	22	37,337	7,228	28,493
Mo.	2,175	90	362	1,723	22	39,802	6,625	31,531
N. Dak.	323	13	140	170	22	5,911	2,562	3,111
S. Dak.	510	25	144	341	21	8,925	2,520	5,968
Nebr.	855	46	234	575	20	14,278	3,908	9,602
Kans.	1,547	68	289	1,190	20	25,835	4,826	12,873
Del.	98	4	12	83	30	2,450	300	2,075
Md.	337	15	50	272	29	8,155	1,210	6,582
Va.	713	40	167	506	26	15,472	3,624	10,980
W. Va.	365	13	89	263	29	8,833	2,154	6,365
N. C.	509	40	169	300	28	11,860	3,938	6,990
S. C.	207	19	105	83	28	4,823	2,446	1,934
Ga.	381	32	165	184	26	8,268	3,580	3,993
Fla.	148	8	39	101	31	3,818	1,006	2,606
Ky.	795	41	210	545	23	15,264	4,032	10,464
Tenn.	882	42	204	636	22	16,141	3,733	11,639
Ala.	398	24	170	204	24	7,960	3,400	4,080
Miss.	369	25	167	178	23	7,035	3,306	3,418
Ark.	508	27	189	292	22	9,296	3,459	5,344
La.	191	13	112	66	25	3,973	2,330	1,373
Okla.	929	50	297	582	21	16,258	5,198	10,185
Tex.	1,315	70	550	695	21	23,012	9,625	12,162
Mont.	187	7	80	100	27	4,208	1,800	2,250
Ida.	198	7	54	138	25	4,118	1,123	2,870
Wyo.	64	3	24	37	28	1,491	559	862
Colo.	300	12	95	193	25	6,240	1,976	4,014
N. Mex.	71	3	27	42	26	1,541	586	911
Ariz.	72	2	13	57	34	2,038	368	1,613
Utah	165	5	24	137	24	3,300	480	2,740
Nev.	24	1	6	17	29	581	145	411
Wash.	787	22	95	669	26	17,078	2,062	14,517
Oreg.	357	11	70	275	26	7,747	1,519	5,968
Calif.	1,477	41	166	1,270	27	33,232	3,735	23,575
U. S.	32,000	1,388	7,307	23,309	25.3	668,934	149,550	490,945

Table XXXVe  
U. S. DEPARTMENT OF AGRICULTURE  
Bureau of Agricultural Economics

ESTIMATED PRODUCTION, DISPOSAL AND VALUE OF CHICKEN EGGS - 1928

State	Number of eggs (Millions)					Value (thousands of dollars)		
	Laid	Used for hatch-	Consumed as food	Sold ex-	per doz.	Laid	Consumed	Sold
		ing	on farms	cept for hatchings			on farm	(cash income)
					cents			
Me.	200	6	38	155	39	6,500	1,335	5,038
N. H.	138	6	18	115	42	4,830	630	4,025
Vt.	93	3	24	65	37	2,834	739	2,002
Mass.	218	7	39	171	43	7,304	1,396	6,122
R. I.	39	1	5	33	45	1,462	188	1,238
Conn.	308	8	32	169	43	7,446	1,146	6,050
N. Y.	1,348	33	218	1,097	36	40,440	6,540	32,910
N. J.	411	13	44	354	40	13,686	1,465	11,788
Penna.	1,651	46	228	1,376	34	46,723	6,452	38,941
Ohio	1,399	64	293	1,542	30	47,475	7,325	38,550
Ind.	1,347	60	236	1,051	28	31,385	5,499	24,488
Ill.	1,778	76	345	1,357	27	40,005	7,762	30,532
Mich.	1,143	38	220	885	30	28,575	5,500	22,125
Wis.	1,084	36	242	806	28	25,257	5,639	18,780
Minn.	1,140	48	250	842	27	25,650	5,625	18,945
Iowa	2,104	85	369	1,651	26	45,657	8,007	35,827
Mo.	2,090	83	338	1,669	35	43,472	7,030	34,715
N. Dak.	334	13	131	190	24	6,680	2,620	3,800
S. Dak.	540	26	135	380	25	11,252	2,808	7,904
Nebr.	887	46	219	623	24	17,740	4,380	12,460
Kans.	1,614	69	270	1,275	24	32,280	5,400	25,500
Del.	96	4	11	81	34	2,717	311	2,292
Md.	320	14	47	259	32	8,344	1,255	6,915
Va.	709	35	156	518	29	17,158	3,775	12,536
W. Va.	366	12	83	271	31	9,443	2,141	6,992
N. C.	500	33	158	309	28	11,650	3,681	7,200
S. C.	197	17	98	82	29	4,767	2,372	1,984
Ga.	376	26	154	195	29	9,099	3,727	4,719
Fla.	144	6	37	101	31	3,715	955	2,606
Ky.	677	35	196	447	27	15,232	4,410	10,058
Tenn.	800	36	190	574	25	16,640	3,952	11,939
Ala.	357	20	159	178	27	8,032	3,578	4,005
Miss.	350	20	156	174	26	7,595	3,325	3,776
Ark.	407	25	177	256	25	9,714	3,682	5,533
La.	178	12	105	61	28	4,147	2,446	1,421
Okla.	903	48	277	578	24	18,060	5,540	11,560
Tex.	1,383	58	513	812	24	27,660	10,260	16,240
Mont.	221	7	75	139	27	4,972	1,688	3,123
Ida.	219	7	50	162	25	4,555	1,040	3,370
Wyo.	73	3	22	46	28	1,701	513	1,118
Colo.	322	13	68	221	27	7,245	1,960	4,972
N. Mex.	73	3	25	46	29	1,767	605	1,113
Ariz.	55	2	12	41	35	1,606	350	1,197
Utah	184	5	24	156	26	3,993	521	3,385
Nev.	26	1	6	20	29	629	145	484
Wash.	875	19	89	768	28	20,387	2,074	17,894
Oreg.	385	10	66	309	27	8,662	1,485	6,952
Calif.	1,599	33	154	1,411	28	37,257	3,588	32,876
U. S.	32,120	1,271	6,822	24,033	28.3	754,080	156,045	560,005



Table XXXVf.

U.S. Department of Agriculture

## ESTIMATED PRODUCTION, DISPOSAL AND VALUE OF CHICKEN EGGS - 1939

ESTIMATED PRODUCTION, DISPOSAL AND VALUE OF CHICKEN EGGS - 1929								
State	Number of eggs (Millions)				Value per dozen (cents)	Total Value (thousands of dollars)		
	Laid	Used for hatching	Consumed as food on farms	Sold ex- cept for hatching		Laid	Gross income	
							Consumed on farm	Sold (cash income)
Maine	197	7	38	152	42	6,895	1,330	5,320
N.H.	133	6	17	110	46	5,094	651	4,213
Vt.	87	4	23	60	39	2,828	748	1,950
Mass	220	8	39	173	50	9,174	1,626	7,214
R.I.	40	1	5	34	49	1,632	204	1,387
Conn.	234	8	32	194	47	9,173	1,254	7,605
N.Y.	1,386	37	213	1,136	38	43,936	6,752	36,011
N.J.	415	14	43	359	43	14,857	1,539	12,852
Pa.	1,703	54	224	1,426	33	51,090	6,720	42,780
Ohio	1,929	73	287	1,568	32	51,504	7,663	41,866
Ind.	1,340	66	231	1,043	29	32,428	5,590	25,241
Ill.	1,814	82	338	1,394	29	43,899	8,180	33,735
Mich.	1,174	44	216	914	31	30,289	5,573	23,581
Iowa	2,062	97	361	1,604	27	46,395	8,122	36,090
Mo.	2,007	93	331	1,584	26	43,552	7,183	34,373
N.Dak.	328	15	128	185	24	6,560	2,560	3,700
S.Dak.	540	30	132	378	25	11,232	2,746	7,862
Nebr.	883	52	214	617	25	18,366	4,451	12,834
Kansas	1,581	71	264	1,245	25	32,385	5,491	25,896
Del.	93	4	11	78	37	2,864	339	2,402
Md.	319	15	46	258	34	9,028	1,302	7,301
Va.	663	37	152	474	30	16,575	3,800	11,850
W.Va.	347	13	81	253	32	9,265	2,163	6,755
N.C.	408	36	154	217	31	10,526	3,973	5,599
S.C.	174	17	96	61	33	4,785	2,640	1,678
Ga.	325	28	151	146	31	8,385	3,896	3,767
Fla.	135	7	36	92	34	3,820	1,019	2,604
Ky.	631	39	192	400	28	14,702	4,474	9,320
Tenn.	709	36	186	487	27	15,952	4,185	10,958
Ala.	336	21	155	159	29	8,131	3,751	3,848
Miss.	305	20	152	132	28	7,106	3,542	3,076
Ark.	451	25	173	253	26	9,787	3,754	5,490
La.	175	13	102	60	28	4,078	2,377	1,398
Okla.	885	50	271	564	24	17,700	5,420	11,280
Tex.	1,314	61	503	750	25	27,331	10,462	15,600
Mont.	227	7	73	147	27	5,108	1,642	3,308
Idaho	237	7	49	181	27	5,332	1,102	4,072
Wyo.	71	3	22	46	30	1,775	550	1,150
Colo.	350	14	86	250	28	8,155	2,004	5,825
N.Mex.	75	3	24	48	31	1,935	619	1,238
Ariz.	55	2	12	41	40	1,382	280	955
Utah	235	5	23	207	29	5,687	557	5,009
Nev.	28	1	6	22	31	722	155	568
Wash.	878	23	87	769	31	22,652	2,245	19,840
Oreg.	364	11	64	289	31	9,391	1,651	7,456
Calif.	1,576	42	151	1,383	32	42,079	4,032	36,926
U.S.	31,741	1,397	6,676	23,668	30.1	789,595	161,564	593,984
Wis.	1,093	29	237	817	29	26,451	5,735	19,771
Minn.	1,209	56	245	903	27	27,202	5,512	20,430

## THE SEASONAL PRODUCTION OF EGGS

For knowledge of the seasonal trend of layings by ordinary farm flocks we have, heretofore, had to depend largely upon the evidence of the volume of eggs coming to market. Such records of layings as were available were mostly for commercial flocks and these records were affected by the differences in extent and date of culling.

Table XXXVI and charts 14 and 15 give the first reasonably complete picture of seasonal farm egg production. The records cover an average of about 20,000 farm flocks monthly over a period of five years. The absolute production shown per flock is higher, and the proportion of fall and winter eggs may be somewhat larger, than for average flocks. Otherwise, the relative production indicated as between months and years, can be accepted as fairly accurate for the United States, and for the main geographical divisions and the larger states. While layings are supposed to be reported for the first day of each month, the actual date of the individual report may vary a day or two either way, so that the daily average relates to a period extending over possibly 5 days. This tends to lessen the effect on layings of an unusual day of heat, cold or storm. In addition to this, weather influences vary in different sections of a state, and especially in different states and regions, and their effect upon layings by different flocks varies with the care and protection given the latter. Also, the effect of a major weather disturbance is not as a rule immediate, but tends to be cumulative, and more or less lasting according as the disturbance continues over a longer or shorter period. If the effects of an existing disturbance are not immediately evident in the current report of layings they may be reflected in the record for the subsequent month. A temporary decrease in the rate of layings, may be balanced by an increase when the repressive influence is past. Even allowing for these various compensating factors, however, the reported layings for a single day each month do not insure the accuracy desirable in an index of the rate of layings designed to represent a 30 day period. While any irregularity in a particular month will tend to be neutralized in the twelve month average by the chance deviations in other months, it would be desirable to eliminate this source of possible error by having a semi-monthly or weekly return of layings from a smaller selected list of producers.

The absolute layings per farm flock, as shown in table XXXVI, being limited to flocks of less than 400 hens and pullets of laying age on January 1 and proportionate numbers in other months, the large commercial flocks are excluded; but on the other side a due proportion of smaller flocks is lacking. The layings reported are larger than would be true for the average farm flock and the excess is greatest in the South. The principal value of the figures shown in Table XXXVI is in their indication of seasonal trends in production. The seasonal trend of layings shown is probably close to that of the average of all flocks, possibly tending somewhat in the direction of the trend in commercial flocks. In making comparisons between states it is necessary to remember that the flocks reported may not be equally representative in the different states, especially in states where commercial flocks are numerous, since these latter have been excluded from the averages.

While the figures in Table XXXVI combine the two factors of numbers of hens and rate of laying; this advantage is somewhat offset by the fact that the varying number and size of the farms included in the computations from month to month results in greater variations in the averages than occur in the figures for layings per 100 hens and pullets. These variations are small in the larger agricultural states, where the number of reports average from 500 to 1,000 or more monthly. In a few small northeastern and far western states with small returns, the variations are so great as to vitiate the value of the monthly indication.



Table XXXVI

## EGGS LAID PER FARM FLOCK - 1925 - 1929

(As reported by crop correspondents  
for the first day of each month.)

Geographic division	Jan. 1	Feb. 1	Mar. 1	Apr. 1	May 1	June 1	July 1	Aug. 1	Sept. 1	Oct. 1	Nov. 1	Dec. 1	Sum of 12 layings
No. Atlantic													
1925	13.2	18.7	34.0	47.7	47.3	42.2	34.6	31.5	25.9	19.2	10.2	11.4	335.9
1926	17.9	21.5	31.4	42.4	49.2	45.3	35.3	33.8	27.8	20.0	11.9	12.0	348.4
1927	16.3	21.6	34.5	51.6	50.8	44.4	36.5	31.5	26.8	20.4	12.5	12.5	359.4
1928	17.5	24.1	32.5	46.8	47.6	44.8	37.5	31.1	26.5	19.2	13.5	14.9	354.9
1929	21.1	25.0	33.7	51.1	48.7	42.8	36.2	32.7	27.8	20.5	14.3	15.0	369.8
5 year av.	17.2	22.2	33.2	47.9	48.7	43.9	36.0	32.1	27.0	19.9	12.5	13.3	353.7
No. Central													
1925	9.1	17.0	37.9	57.2	57.4	48.6	39.2	33.0	29.0	23.2	12.3	10.3	374.0
1926	15.3	22.9	40.9	57.0	60.2	50.7	41.8	34.8	29.9	22.9	13.6	9.6	399.7
1927	15.0	21.7	43.4	63.6	61.4	52.7	40.5	33.5	28.6	21.0	14.8	11.9	408.1
1928	14.1	24.4	35.2	59.6	58.6	51.2	41.2	33.2	29.3	23.7	15.6	12.5	400.7
1929	19.5	21.6	33.1	61.1	61.4	52.9	41.7	35.1	29.7	22.6	15.2	11.6	405.5
5 year av.	14.6	21.5	38.3	59.7	59.8	51.2	40.9	33.9	29.3	22.7	14.5	11.2	397.6
So. Atlantic													
1925	12.2	13.8	26.2	30.6	27.9	23.2	20.8	18.8	14.7	12.9	10.0	8.7	219.7
1926	12.1	15.1	25.3	28.4	27.2	23.9	21.8	19.5	16.1	14.2	11.1	10.2	225.0
1927	13.9	18.8	28.7	32.9	29.4	25.1	22.3	19.7	15.4	13.5	11.2	11.3	242.3
1928	12.8	18.0	25.7	32.3	29.3	25.5	22.1	18.8	15.4	12.4	10.5	10.3	232.9
1929	13.4	17.3	23.1	31.0	26.2	22.6	20.2	18.1	14.5	12.6	9.7	10.1	218.9
5 year av.	12.9	16.6	25.8	31.0	28.0	24.1	21.4	19.0	15.2	13.1	10.5	10.1	227.8
So. Central													
1925	9.0	13.6	27.1	31.7	28.4	24.7	20.7	17.4	14.4	13.4	10.9	9.1	220.5
1926	11.6	14.9	30.1	31.7	29.4	25.1	21.9	19.2	16.7	15.9	13.0	10.2	239.8
1927	14.8	18.6	33.8	38.4	32.8	27.2	23.1	20.0	16.3	15.2	13.5	11.7	265.5
1928	12.4	19.1	26.9	35.8	32.0	27.3	22.1	18.0	15.3	14.1	13.0	10.4	246.5
1929	13.1	18.4	23.6	36.1	30.3	25.3	21.9	19.1	15.4	14.4	12.3	9.3	239.6
5 year av.	12.2	16.9	28.3	34.7	30.6	25.9	21.9	18.7	15.6	14.6	14.5	10.1	242.4
Western													
1925	10.1	17.0	27.8	35.3	36.2	33.2	28.3	24.5	21.9	17.4	13.4	11.0	276.0
1926	16.2	18.8	32.9	30.8	37.8	32.1	27.6	26.5	22.3	18.3	13.8	12.1	297.4
1927	14.4	19.0	30.6	39.5	39.9	34.6	29.7	25.8	23.6	19.6	15.1	14.1	306.0
1928	16.3	21.2	32.2	42.2	41.4	36.1	30.9	26.6	23.7	19.4	13.6	11.0	314.6
1929	16.2	19.9	27.5	37.7	41.2	34.9	30.3	28.8	23.7	20.1	14.3	11.9	306.5
5 year av.	14.6	19.2	30.2	38.7	39.3	34.2	29.4	26.4	23.0	19.1	14.0	12.0	300.1
U.S. (1925)	10.1	15.6	31.5	42.3	40.9	35.1	29.1	25.0	21.2	17.6	11.3	9.8	289.5
1926	13.9	18.7	33.4	41.6	42.4	36.4	30.6	26.5	22.5	18.7	12.8	10.3	308.2
1927	14.8	20.0	36.2	47.8	44.5	38.0	30.9	26.2	22.0	17.7	13.6	12.0	323.7
1928	13.8	21.4	30.9	45.2	43.2	37.7	30.9	25.3	21.9	18.1	13.9	11.5	313.7
1929	16.4	20.0	28.1	45.6	43.1	36.9	30.6	26.6	22.0	18.0	13.2	11.1	311.7
5 year av.	13.8	19.1	32.0	44.5	42.2	36.2	20.4	25.9	21.9	18.0	13.0	10.9	309.4

## TREND OF MONTHLY EGG RECEIPTS AT MARKETS.

See figure 16, page 109, and insert at bottom of page 116.



# EGGS LAID PER FARM FLOCK ON FIRST DAY OF EACH MONTH, 1925-1928

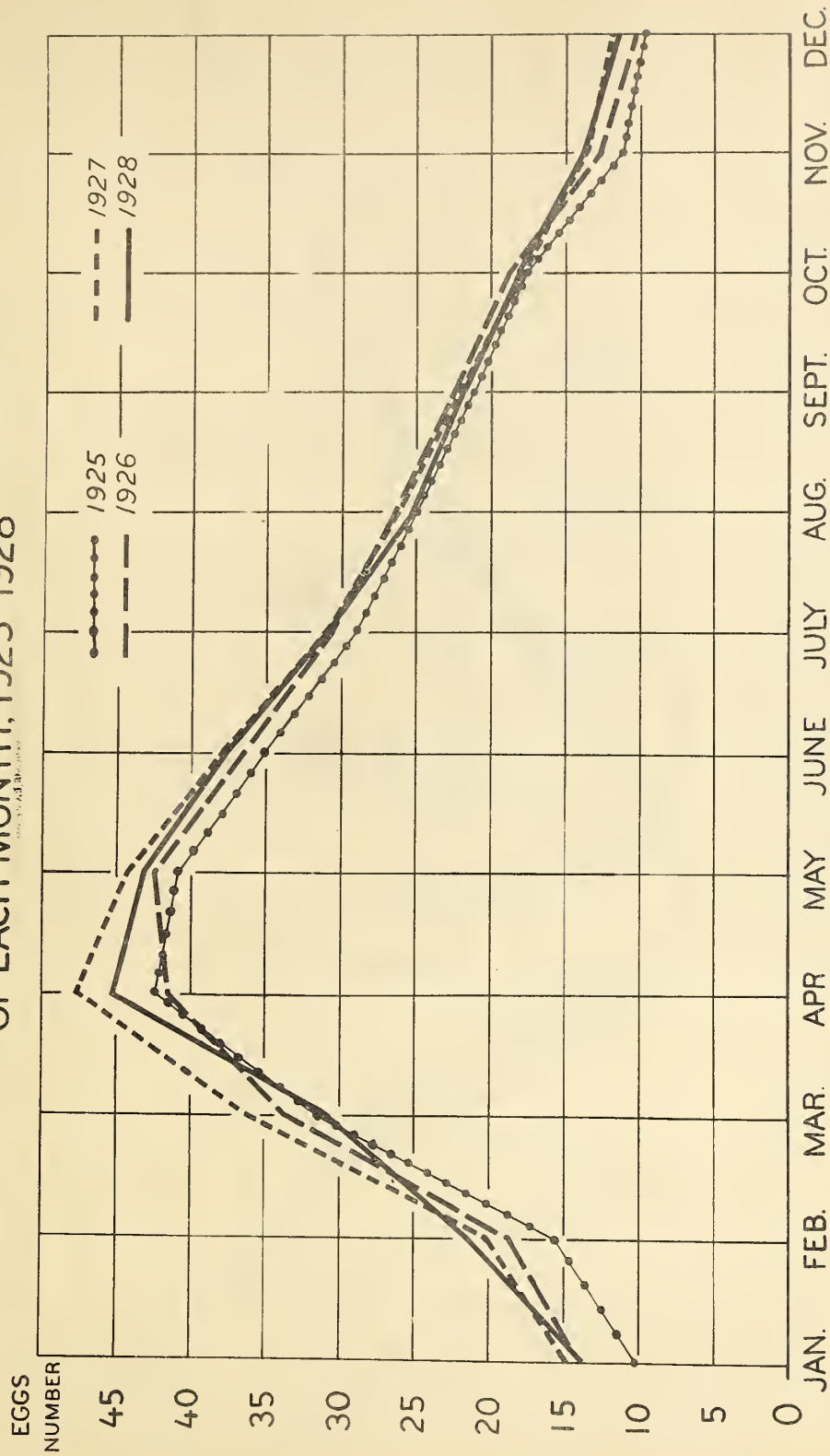
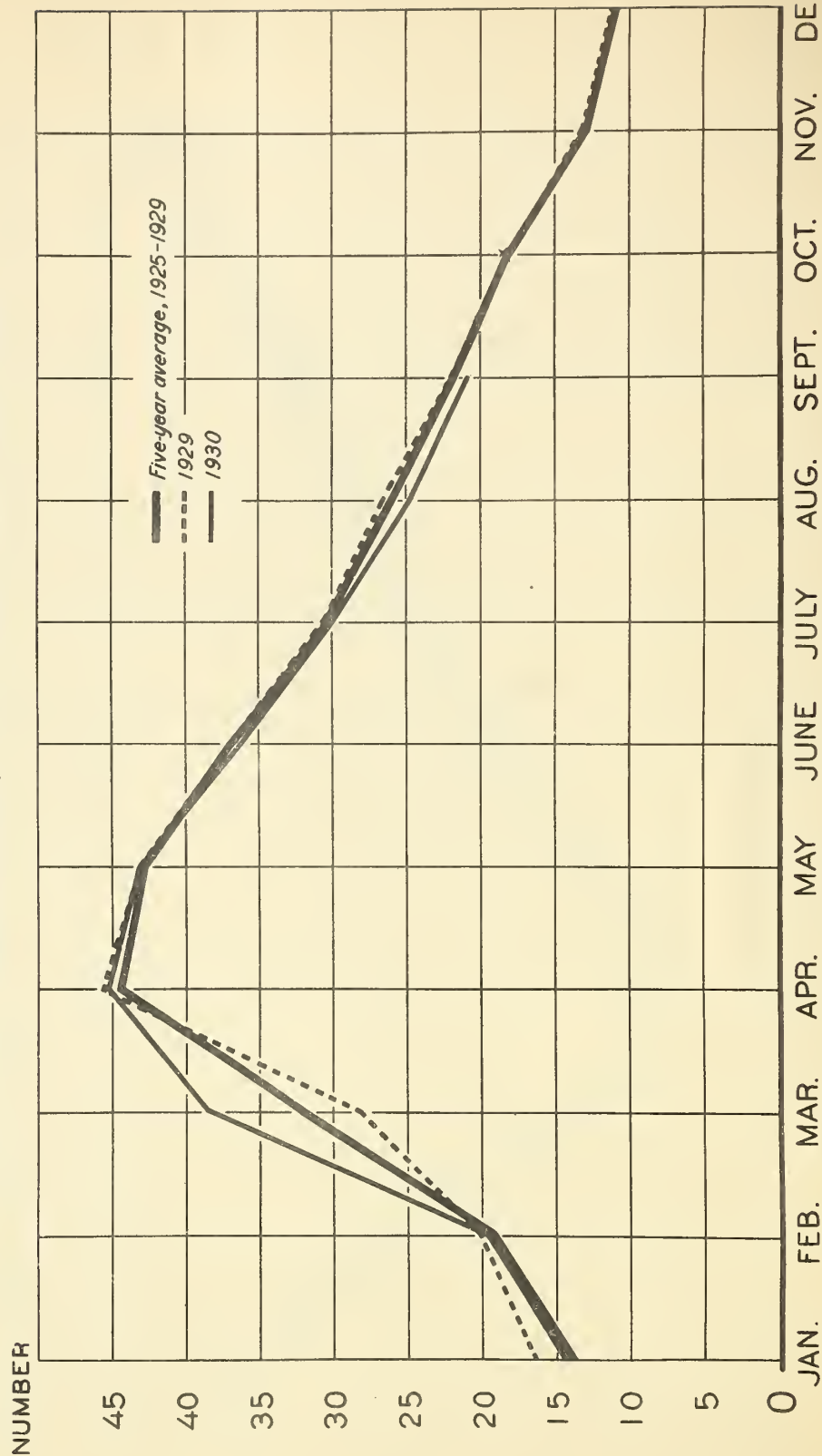


FIGURE 14

# EGGS LAID PER FARM FLOCK ON FIRST DAY OF EACH MONTH FIVE-YEAR AVERAGE, 1925-1929, 1929 AND 1930

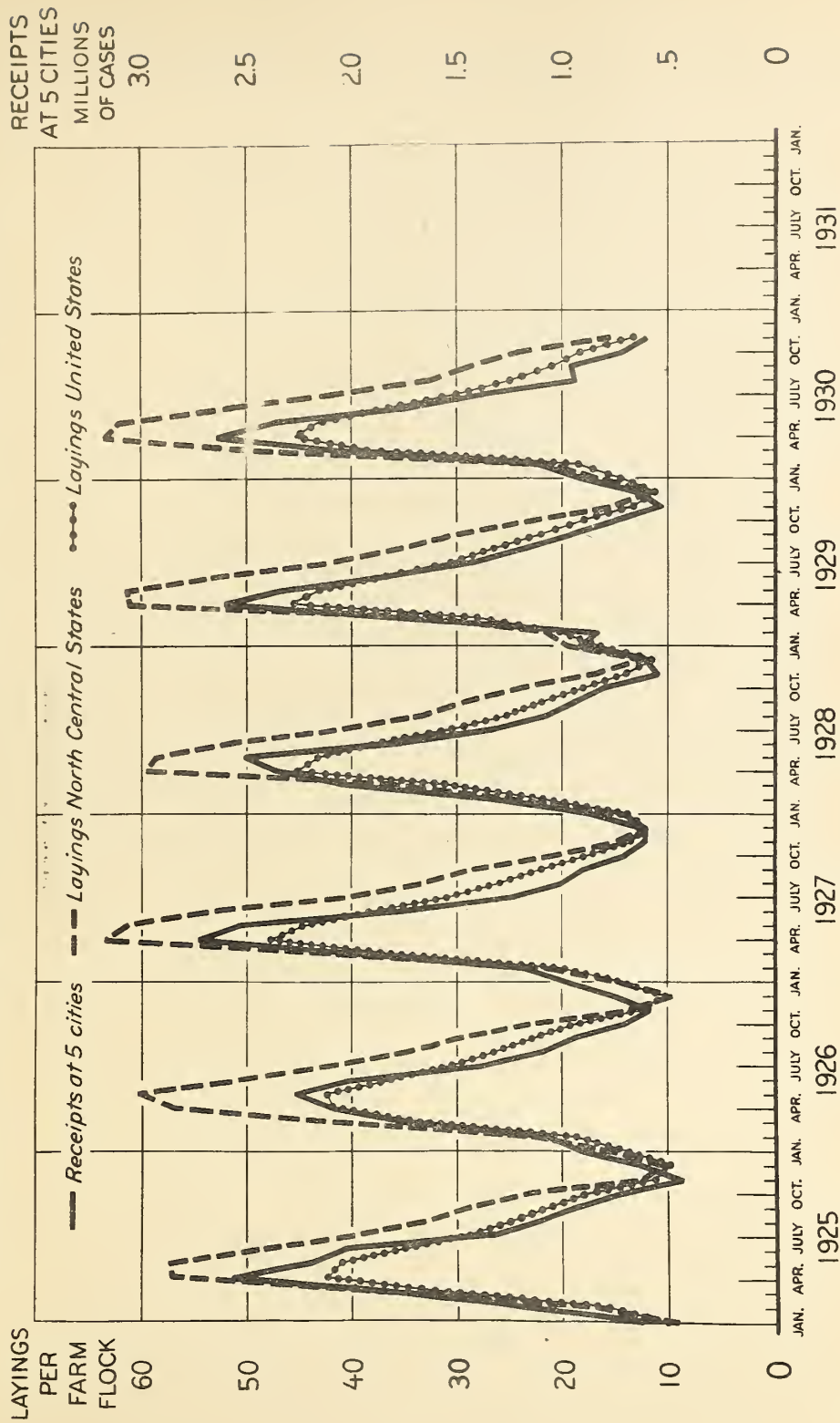


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FIGURE 15

# EGG PRODUCTION PER FARM FLOCK AND RECEIPTS AT 5 MARKETS \*



\* BOSTON, NEW YORK, PHILADELPHIA, CHICAGO, AND SAN FRANCISCO

FIGURE 16





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Table XXXV-a.

EGGS LAID PER FARM FLOCK - 1925

As reported by crop correspondents.

State	'Jan. ' 1	'Feb. ' 1	'Mar. ' 1	'Apr. ' 1	'May ' 1	'June ' 1	'July ' 1	'Aug. ' 1	'Sept. ' 1	'Oct. ' 1	'Nov. ' 1	'Dec. ' 1	Sum of 12 layings
Me.	10.3	19.5	27.1	30.8	33.2	35.4	28.2	27.2	21.7	17.2	13.1	12.5	276.2
N.H.	18.5	19.8	49.2	39.7	41.5	24.6	29.8	25.5	23.3	13.7	8.7	16.0	310.3
Vt.	6.2	10.0	17.6	26.9	30.4	27.6	24.0	18.8	18.9	11.6	5.3	6.7	204.0
Mass.	12.6	18.0	33.0	40.8	32.2	35.0	29.5	28.6	23.8	20.0	16.4	14.6	304.5
R. I.	16.7	27.8	51.8	45.4	48.5	26.1	35.8	27.4	21.2	16.4	12.3	15.0	344.3
Conn.	13.6	17.5	32.1	38.3	42.7	25.9	27.6	29.2	20.1	14.8	9.8	14.7	286.3
N. Y.	11.2	16.7	31.1	47.8	50.5	43.2	35.3	31.3	26.2	17.5	7.0	9.3	330.1
N. J.	17.2	21.5	33.2	58.7	59.7	54.1	36.9	35.2	24.9	22.9	13.0	12.6	389.9
Penna.	15.3	21.0	38.8	54.7	50.7	44.7	38.1	34.9	28.6	22.3	12.0	12.1	373.2
Ohio	11.6	19.3	40.5	58.8	55.2	50.8	39.2	35.0	31.0	25.5	12.5	11.5	390.9
Ind.	11.3	18.6	43.4	62.8	58.6	48.2	40.3	34.1	30.5	24.3	13.5	10.3	395.9
Ill.	9.1	17.4	37.6	60.6	60.4	49.2	40.5	33.9	28.9	23.3	12.9	9.7	383.5
Mich.	8.0	13.4	23.6	41.3	44.3	33.7	32.0	27.1	24.6	19.4	10.5	8.6	291.5
Wis.	8.3	15.0	25.6	41.5	47.0	39.1	29.7	26.0	22.9	19.1	9.6	9.4	293.2
Minn.	7.9	15.4	26.7	48.9	53.0	46.1	37.3	31.5	27.3	21.0	9.6	9.8	334.5
Iowa	8.3	16.5	38.6	67.4	72.0	59.5	49.2	39.1	36.0	27.0	13.9	10.5	438.6
Mo.	10.9	21.3	50.8	69.1	63.3	53.4	40.0	33.3	29.9	25.4	15.3	11.9	424.6
N. Dak.	4.1	8.2	19.3	31.0	40.0	36.0	30.0	27.0	22.0	19.0	8.0	5.9	250.5
S. Dak.	6.2	12.1	31.4	52.7	55.0	44.2	37.8	29.4	28.6	21.7	11.2	8.3	332.6
Nebr.	7.1	13.3	40.2	53.1	54.8	45.2	36.1	31.5	26.5	21.3	10.7	9.5	351.3
Kans.	9.9	22.2	57.8	72.7	69.4	57.2	47.1	39.9	32.3	24.6	14.0	13.1	460.2
Del.	31.8	35.4	54.8	91.8	84.6	61.1	39.0	51.1	34.6	25.9	20.0	18.6	548.7
Md.	16.8	18.4	38.5	59.9	57.4	40.9	38.5	34.2	27.1	21.1	15.5	13.9	382.2
Va.	14.4	14.1	32.5	35.3	34.1	30.1	24.8	23.5	17.7	15.2	10.2	10.6	262.3
W. Va.	12.3	16.4	32.5	41.5	39.0	33.0	26.3	24.2	19.9	16.6	9.6	9.8	281.1
N. C.	11.4	13.2	22.6	25.7	22.3	13.1	17.6	16.0	12.8	12.1	9.9	8.9	190.6
S. C.	10.2	10.2	19.0	23.0	20.2	17.3	15.4	14.5	11.1	9.7	7.9	5.5	164.0
Ga.	10.3	12.3	21.7	24.7	22.2	18.0	18.4	14.7	10.9	10.5	9.2	6.4	179.3
Fla.	15.4	21.1	35.9	29.2	25.2	23.5	20.7	17.4	16.9	12.5	13.2	11.3	242.3
Ky.	7.4	11.4	27.0	35.9	32.0	25.0	20.6	17.3	14.8	14.7	10.2	7.4	233.7
Tenn.	9.1	13.2	26.5	32.4	29.8	23.1	20.1	17.5	14.4	13.1	10.9	7.7	217.8
Ala.	7.7	10.4	21.0	25.3	22.1	20.7	17.9	16.2	12.6	12.3	7.4	8.4	182.0
Miss.	8.5	11.3	19.3	21.1	19.4	18.6	16.1	14.6	12.0	11.0	10.5	10.1	172.5
Ark.	10.2	11.5	20.7	25.4	22.2	19.1	18.2	13.9	12.2	11.9	10.9	7.5	183.7
La.	10.1	13.8	20.3	28.3	25.5	21.4	22.3	20.4	14.9	13.5	12.8	11.5	214.8
Okla.	10.6	19.2	41.1	46.6	42.7	38.0	28.6	24.5	19.5	17.2	11.8	11.8	311.6
Tex.	8.9	16.4	33.3	34.6	30.6	27.9	21.9	16.6	14.5	13.2	12.5	9.5	239.9
Mont.	5.0	11.7	19.6	25.3	35.5	32.7	24.3	20.0	18.9	15.2	6.1	5.7	220.0
Ida.	9.4	11.8	31.5	31.6	37.4	35.2	28.4	26.0	22.5	20.7	14.4	12.9	271.8
Wyo.	6.2	10.8	23.3	33.8	33.1	30.5	23.5	19.9	20.0	18.5	9.6	7.5	236.7
Colo.	5.8	11.2	31.2	37.8	40.4	33.8	27.3	24.1	23.4	16.6	9.5	6.7	267.8
N. Mex.	7.1	15.3	26.5	26.2	25.9	24.4	20.4	16.5	15.8	10.9	10.0	6.4	205.4
Ariz.	18.2	20.8	38.8	43.7	31.7	32.1	26.6	24.6	17.9	22.6	22.7	15.0	314.7
Utah	7.7	15.4	17.6	37.7	31.5	30.4	28.1	23.2	21.6	18.0	14.2	10.3	255.7
Nev.	18.3	12.0	20.8	32.2	42.2	29.7	26.5	23.7	16.1	17.8	7.4	6.7	253.4
Wash.	12.9	21.6	31.9	40.2	39.8	38.2	33.6	26.9	25.0	19.1	15.5	16.6	321.3
Oreg.	10.7	20.1	29.9	40.2	38.0	32.2	32.8	25.5	22.2	18.8	13.7	13.2	297.3
Calif.	13.6	21.3	30.3	35.2	34.9	32.8	27.7	26.9	22.2	16.5	17.2	11.8	290.4
U. S.	10.1	15.6	31.5	42.3	40.9	35.1	29.1	25.0	21.2	17.6	11.3	9.8	289.5

U. S. DEPARTMENT OF AGRICULTURE  
Bureau of Agricultural Economics

Table XXXVI-b.

EGGS LAID PER FARM FLOCK\* 1926  
As reported by crop correspondents

State	Jan. 1	Feb. 1	Mar. 1	Apr. 1	May 1	June 1	July 1	Aug. 1	Sept. 1	Oct. 1	Nov. 1	Dec. 1	Sum of 12 layings
Me.	18.2	21.5	27.2	31.8	30.7	31.3	28.9	26.9	19.8	18.2	10.0	10.0	274.5
N. H.	21.5	17.3	34.6	30.5	32.3	30.5	25.1	20.7	15.1	13.5	10.4	13.2	264.7
Vt.	10.8	15.5	16.3	23.7	34.0	25.0	22.4	19.8	15.3	12.6	5.7	6.4	207.5
Mass.	21.0	24.3	29.8	38.2	41.8	44.5	30.2	30.3	23.9	18.4	16.6	15.4	334.4
R. I.	21.0	11.8	30.8	34.3	46.6	40.6	38.0	31.3	28.2	22.5	13.2	17.8	336.1
Conn.	16.0	19.9	33.1	39.2	43.5	36.6	30.4	29.5	27.5	19.8	12.9	13.0	321.4
N. Y.	16.6	18.8	23.8	35.8	49.4	48.8	37.1	31.9	27.4	19.5	9.3	10.7	332.1
N. J.	19.6	23.9	37.1	49.9	65.1	50.2	34.2	37.3	28.0	23.6	16.7	16.5	402.1
Penna.	19.1	24.5	39.6	53.6	55.5	49.2	38.8	37.5	32.8	21.9	14.0	12.7	399.2
Ohio	18.3	24.2	39.2	55.8	58.3	51.6	45.1	37.7	33.7	26.4	14.6	11.3	416.7
Ind.	15.7	23.9	43.2	59.6	59.6	50.7	41.2	36.0	33.8	24.7	13.9	10.0	412.3
Ill.	14.1	21.1	40.4	59.5	62.5	50.5	40.7	34.7	30.5	24.1	14.8	9.0	401.9
Mich.	14.5	17.2	23.8	39.5	47.4	44.1	36.1	29.6	26.0	20.4	10.3	7.5	316.4
Wis.	14.3	19.2	27.9	40.9	49.5	42.7	34.4	28.6	24.9	17.8	9.6	7.8	317.6
Minn.	13.3	18.1	27.2	46.7	54.6	45.3	38.6	31.7	25.9	18.6	10.3	7.5	337.8
Iowa	14.9	26.6	49.9	71.1	75.3	63.2	51.3	41.7	36.6	25.9	16.7	10.9	484.1
Mo.	17.2	26.5	58.3	70.3	70.8	56.5	46.4	37.9	30.7	26.0	15.9	11.7	468.2
N. Dak.	8.4	10.9	21.6	36.0	41.2	35.7	28.8	26.2	22.0	17.0	8.9	4.2	260.9
S. Dak.	11.8	15.2	37.2	56.6	57.2	46.1	36.8	29.3	25.9	18.1	11.4	6.8	352.4
Nebr.	12.3	21.9	45.6	57.4	51.8	46.5	40.1	30.6	27.5	20.0	13.9	9.2	376.8
Kans.	21.0	37.6	57.0	70.8	72.2	58.2	46.8	40.6	30.9	25.4	17.2	13.6	491.3
Del.	32.8	36.4	58.1	88.0	83.0	69.9	53.8	43.4	46.2	31.3	15.4	24.6	582.9
Md.	21.5	27.3	38.7	61.0	58.0	47.6	46.9	37.9	27.5	24.2	14.8	11.9	417.3
Va.	14.6	17.6	34.4	36.9	34.1	29.5	24.9	22.4	19.1	15.9	12.2	10.9	272.5
W. Va.	14.4	18.1	29.6	37.3	38.9	35.0	29.0	26.3	21.3	17.0	11.0	8.6	286.5
N. C.	10.5	13.1	21.4	21.7	21.7	18.5	18.6	16.1	14.3	13.0	11.0	10.3	190.2
S. C.	9.6	10.8	19.1	20.5	19.7	18.5	17.4	14.9	12.6	12.3	8.8	9.4	173.6
Ga.	9.0	12.4	19.6	20.5	19.5	18.1	17.0	16.1	12.2	11.7	10.3	9.2	175.6
Fla.	15.9	20.7	30.6	32.6	28.0	24.0	20.0	22.5	16.3	14.0	13.6	12.1	250.3
Ky.	10.3	13.0	29.0	34.0	32.4	25.7	23.0	19.7	17.6	16.3	12.3	8.8	242.1
Tenn.	10.6	13.9	30.7	33.8	29.0	23.2	20.5	18.9	16.3	16.5	13.0	9.1	235.5
Ala.	10.1	13.8	21.0	23.9	31.9	20.5	18.2	15.2	12.7	11.8	10.8	9.0	188.9
Miss.	11.1	15.0	25.0	24.6	22.2	21.3	17.6	16.9	13.4	12.3	11.3	9.0	199.7
Ark.	9.9	13.9	24.0	26.6	24.5	20.1	18.9	15.7	13.3	14.8	10.8	7.1	199.6
La.	13.1	15.1	28.0	27.4	27.2	23.7	21.2	16.8	15.1	14.5	13.7	11.9	227.7
Okla.	17.4	21.5	49.8	50.1	47.8	38.4	33.5	28.8	22.8	19.9	14.9	13.9	358.8
Tex.	11.8	14.6	32.6	32.6	30.5	27.3	22.8	20.5	19.5	18.8	15.7	12.1	258.8
Mont.	13.7	14.3	23.7	34.6	35.9	26.6	22.1	18.3	19.9	14.5	10.0	6.1	239.7
Ida.	17.1	22.7	33.3	39.3	43.2	34.7	29.1	27.9	22.9	20.4	14.1	13.3	334.0
Wyo.	11.0	13.8	26.0	36.3	39.3	31.1	24.4	22.4	19.8	19.2	10.6	9.2	263.1
Colo.	12.0	17.8	34.9	41.9	40.1	34.5	27.8	24.5	21.5	18.8	12.5	7.9	294.2
N. Mex.	6.5	13.7	26.8	26.5	28.7	25.6	21.8	16.9	18.2	14.8	10.6	9.6	219.7
Ariz.	12.7	22.8	50.4	44.0	37.0	32.7	28.4	25.0	19.5	18.9	11.3	15.4	318.1
Utah	12.7	21.3	27.2	35.0	41.1	30.6	31.5	25.6	23.4	18.5	12.0	15.0	293.9
Nev.	20.5	23.5	36.6	41.7	43.8	47.3	34.1	24.9	20.5	25.9	16.1	14.7	349.6
Wash.	19.2	19.0	33.1	41.7	39.9	40.5	30.0	28.8	22.6	19.6	17.7	16.2	328.3
Oreg.	18.4	20.5	32.0	41.2	39.0	27.4	25.6	25.6	19.7	20.2	14.2	14.6	298.4
Calif.	20.1	19.7	37.9	39.1	34.6	30.5	29.3	32.7	23.9	19.4	14.9	12.4	314.5
U. S.	13.9	18.7	33.4	41.6	42.4	36.4	30.6	26.5	22.5	18.7	12.8	10.3	308.2



Table XXXVc.

EGGS LAID PER FARM FLOCK - 1927  
As reported by crop correspondents.

State	Jan. 1	Feb. 1	Mar. 1	Apr. 1	May 1	June 1	July 1	Aug. 1	Sept. 1	Oct. 1	Nov. 1	Dec. 1	Sum of twelve layings
Me.	16.4	10.2	22.6	36.8	35.6	32.3	26.2	24.0	20.3	16.2	11.7	12.1	272.6
N.H.	14.6	17.5	28.5	39.5	33.7	24.4	28.1	28.3	20.2	17.7	10.3	15.7	278.5
Vt.	9.8	13.7	17.4	29.3	27.5	27.1	22.5	17.2	15.8	14.3	6.2	7.0	207.8
Mass.	20.7	10.5	31.9	32.7	36.0	33.9	33.9	25.2	22.4	20.3	14.4	20.3	310.2
R.I.	13.8	21.2	36.3	51.5	34.9	44.0	33.2	32.0	29.3	24.6	7.4	18.1	346.3
Conn.	19.2	17.3	29.0	47.0	50.3	30.2	33.2	29.5	27.4	25.5	18.8	16.0	351.4
N.Y.	14.6	19.3	29.5	47.9	51.8	46.2	39.3	31.0	27.5	19.3	10.6	10.1	347.1
N.J.	17.5	24.9	36.3	60.2	65.0	50.4	33.9	36.5	27.2	24.0	16.6	13.4	405.9
Pa.	17.7	26.1	44.4	63.4	57.7	50.3	39.8	35.8	29.9	22.1	13.7	13.4	414.3
Ohio	17.6	25.8	46.0	66.5	60.7	54.4	42.3	36.7	30.9	24.0	15.4	14.7	435.0
Ind.	15.9	21.6	48.3	69.1	63.1	53.5	41.5	36.0	29.2	21.6	14.3	12.3	426.4
Ill.	15.0	18.7	48.2	68.6	62.6	52.1	39.2	32.4	28.0	19.3	15.7	11.5	411.3
Mich.	12.8	17.4	30.8	47.5	51.4	43.6	34.1	28.3	24.3	19.0	11.4	10.3	330.9
Wis.	12.8	18.8	32.1	51.1	52.3	41.3	33.2	27.5	24.0	16.6	11.6	9.3	333.6
Minn.	11.8	16.7	26.5	48.2	56.6	48.5	37.8	30.9	25.6	17.6	10.6	7.2	338.0
Iowa	12.7	24.1	49.2	74.1	78.6	66.0	50.8	40.6	35.3	23.9	16.4	12.3	484.0
Mo.	20.6	26.1	58.9	78.8	68.7	61.0	43.1	34.8	28.8	22.8	18.4	15.4	477.4
N.D.	5.7	8.9	15.2	35.0	38.5	34.9	28.9	22.9	21.1	19.6	11.4	3.7	245.8
S.D.	11.2	17.3	33.2	49.9	54.5	48.2	36.7	32.2	30.6	21.8	14.5	7.1	357.2
Nebr.	13.5	23.3	41.0	54.5	53.5	47.2	39.1	31.2	28.0	18.4	14.0	11.9	375.6
Kans.	19.9	29.5	59.2	83.2	69.9	58.1	47.5	38.0	32.5	24.6	20.0	18.2	500.6
Del.	22.9	42.9	63.2	82.3	88.8	84.5	63.2	62.9	41.6	19.0	27.5	41.5	640.3
Md.	18.3	28.7	50.5	69.3	64.0	52.1	43.9	35.7	31.6	22.1	16.6	16.3	449.1
Va.	14.8	21.0	37.0	44.3	39.4	31.3	27.4	24.7	17.7	15.7	12.1	12.0	297.4
W.Va.	12.6	20.8	34.2	44.3	40.4	35.7	25.8	23.0	18.1	14.9	10.2	9.8	269.8
N.C.	12.9	16.4	24.9	28.1	24.0	19.9	18.1	16.4	13.6	12.5	11.7	11.3	209.8
S.C.	13.6	16.6	22.1	23.3	21.3	18.5	18.4	16.6	11.9	11.8	9.9	10.2	193.2
Ga.	12.9	14.4	21.2	22.8	19.1	18.1	17.7	15.0	12.1	11.2	9.2	9.4	183.1
Fla.	17.9	33.4	35.7	27.1	27.6	25.7	23.0	19.2	17.0	14.3	12.5	11.9	265.3
Ky.	13.5	16.3	35.4	46.4	38.2	29.5	22.9	20.9	16.5	14.9	11.7	9.0	275.2
Tenn.	13.2	18.5	36.7	42.2	33.0	27.4	22.8	17.6	16.5	13.8	13.1	10.4	265.2
Ala.	13.6	15.7	24.0	26.8	23.8	21.3	18.6	17.2	12.6	10.1	9.7	9.9	203.3
Miss.	12.7	14.9	23.9	26.4	23.7	20.0	18.2	15.7	12.7	11.8	11.3	10.6	201.9
Ark.	11.9	13.3	27.7	28.4	25.9	21.5	16.6	15.6	13.6	16.3	12.0	9.7	212.5
La.	16.0	19.2	29.2	29.1	24.2	20.5	20.9	17.7	13.6	12.9	12.0	10.0	225.3
Okla.	21.0	24.3	54.4	59.3	50.3	42.3	34.2	28.9	22.7	21.0	17.7	15.0	391.1
Tex.	16.7	23.4	36.7	42.4	37.0	30.8	27.4	23.5	19.0	18.1	17.5	15.6	308.1
Mont.	7.3	10.0	18.5	30.2	29.5	24.9	21.5	18.9	17.3	19.3	11.1	5.4	213.9
Idaho	16.5	22.0	28.8	43.6	42.5	36.6	32.4	26.1	26.5	21.9	16.8	16.3	332.0
Wyo.	8.9	14.2	24.6	31.8	33.4	32.7	26.3	21.7	19.8	15.0	10.8	8.3	247.5
Colo.	9.9	18.0	24.6	38.0	39.4	34.9	28.9	25.9	22.3	17.0	12.4	8.4	279.7
N.Mex.	9.9	16.2	24.4	31.9	29.1	27.4	29.0	21.0	19.0	14.0	9.9	8.2	240.0
Ariz.	16.9	20.6	30.1	35.0	40.6	35.6	30.7	30.0	21.0	17.0	20.3	22.2	320.0
Utah	15.9	20.8	26.3	36.5	38.4	36.1	28.0	24.1	22.5	19.1	16.3	18.9	302.9
Nev.	10.9	17.6	41.4	38.4	40.2	32.4	24.5	35.8	18.3	19.3	18.1	16.6	303.5
Wash.	18.5	22.6	37.1	41.9	47.3	41.0	36.8	28.8	26.8	24.8	17.8	17.1	360.5
Oreg.	17.6	17.3	35.9	43.2	42.2	35.5	28.8	30.8	28.2	20.9	18.3	18.7	337.4
Calif.	16.2	21.5	35.0	43.3	41.7	34.1	29.6	25.6	24.0	18.8	15.3	16.3	322.2
U. S.	14.8	20.0	36.2	47.8	44.5	38.0	30.9	26.2	22.0	17.7	13.6	12.0	323.7

EGGS LAID PER FARM FLOCK - 1920  
As reported by crop correspondents.

State	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Sum of twelve layings
	1	1	1	1	1	1	1	1	1	1	1	1	
Me.	16.5	21.2	27.8	32.9	30.3	33.5	28.1	23.3	19.5	16.4	12.9	15.0	277.9
N.H.	23.0	20.4	31.6	39.6	30.0	31.2	28.1	26.5	23.2	19.0	15.3	13.8	301.7
Vt.	11.6	14.4	10.2	28.1	33.2	27.4	26.2	19.5	10.5	12.0	8.0	5.4	222.5
Mass.	21.2	24.5	42.6	44.9	45.4	39.5	32.8	27.4	25.5	20.4	16.6	17.2	350.4
R.I.	17.9	22.5	30.5	73.6	51.1	42.4	33.5	30.1	23.4	13.7	10.2	10.6	367.5
Conn.	23.7	23.3	30.9	45.1	44.3	41.8	34.7	31.4	25.5	18.4	15.1	20.9	356.1
N.Y.	15.2	22.0	27.6	41.9	36.6	45.5	35.7	31.4	25.8	19.0	11.7	11.3	339.1
N.J.	14.3	25.5	33.4	59.4	57.9	51.2	40.4	32.4	25.6	20.7	12.1	12.6	390.5
Pa.	19.3	27.7	37.3	55.0	54.1	49.5	40.3	31.4	29.3	20.7	15.3	15.1	399.0
Ohio	17.4	23.7	37.1	60.0	58.1	53.7	43.5	34.2	31.6	24.5	17.9	14.7	416.4
Ind.	14.4	23.2	34.5	62.0	60.8	51.5	42.1	34.7	31.0	24.0	18.2	13.3	409.7
Ill.	12.0	22.5	35.7	62.1	58.8	43.4	39.6	32.1	28.5	22.5	16.5	13.0	392.5
Mich.	14.4	20.3	28.3	47.1	48.8	44.4	34.2	25.6	25.5	19.2	15.3	10.9	334.5
Wis.	14.2	21.0	29.0	47.2	49.3	44.8	34.0	28.5	25.9	20.6	13.8	12.7	341.0
Minn.	10.1	17.0	25.7	46.3	51.3	45.3	37.3	28.5	26.9	21.4	13.4	11.0	335.2
Iowa	11.0	26.3	41.3	73.3	73.2	65.3	51.0	39.5	36.9	28.9	20.2	13.7	480.6
Mo.	18.9	30.4	45.0	73.0	67.3	55.2	44.1	34.5	28.6	25.0	18.7	14.3	455.8
N.D.	4.2	9.5	19.7	34.4	30.2	33.2	25.8	23.6	22.2	17.3	10.3	6.5	244.9
S.D.	7.3	18.8	32.1	57.6	55.6	47.4	39.4	33.4	27.7	24.9	13.3	9.2	366.7
Nebr.	13.1	20.1	38.1	56.8	52.7	47.9	40.5	34.5	25.4	22.3	13.6	9.8	382.8
Kans.	19.0	39.3	53.3	69.9	69.6	59.8	49.2	42.7	33.4	27.4	20.0	12.5	496.9
Del.	35.7	51.1	40.1	97.6	103.7	97.8	69.0	55.4	36.4	20.6	17.1	14.6	647.1
Md.	10.8	29.0	40.6	55.3	55.1	46.4	41.0	33.8	28.2	21.7	16.2	17.3	403.4
Va.	14.2	20.7	32.2	41.6	35.6	29.3	24.1	21.9	18.2	15.5	11.7	12.1	277.1
W.Va.	12.0	19.6	29.5	40.1	40.0	35.3	29.5	24.6	21.5	15.6	11.4	10.5	289.6
N.C.	12.5	17.2	23.4	28.8	24.3	20.9	18.4	16.1	14.0	10.8	10.3	10.0	207.2
S.C.	11.4	15.4	21.0	26.4	21.9	19.9	18.2	14.5	10.5	9.0	8.5	8.2	184.9
Ge.	10.6	13.4	18.6	23.2	21.5	20.4	17.5	15.2	12.0	10.1	8.9	8.5	179.8
Fla.	15.0	21.0	25.7	26.9	28.8	23.3	26.3	18.6	15.1	13.5	11.9	11.7	237.8
Ky.	10.0	14.5	22.4	35.3	33.2	28.0	20.3	15.6	14.5	12.3	11.4	8.9	226.9
Tenn.	11.4	16.2	25.7	37.5	32.2	24.9	21.6	17.7	15.0	13.2	11.0	8.6	235.8
Ala.	9.5	13.3	20.5	25.5	22.3	19.3	16.2	13.4	10.9	9.9	3.9	7.9	177.6
Miss.	10.9	14.4	21.2	25.5	21.0	20.1	17.0	14.0	11.2	10.4	10.0	9.1	185.6
Ark.	11.4	16.1	19.8	27.3	28.8	22.6	18.3	14.1	12.0	11.6	11.3	10.0	203.8
La.	10.5	16.3	22.4	29.0	25.1	21.4	16.2	17.6	12.7	15.6	12.6	10.1	209.5
Okla.	17.7	29.9	39.3	53.2	46.2	39.7	34.2	27.5	21.5	20.2	17.0	12.7	359.1
Tex.	15.3	26.7	35.9	44.2	39.1	34.7	27.3	21.8	19.6	18.2	18.2	13.8	314.8
Mont.	7.5	11.5	22.4	32.3	35.3	31.0	26.9	22.9	18.9	16.6	11.7	8.3	245.3
Idaho	16.2	20.6	35.2	46.7	44.7	42.4	40.8	29.4	30.4	25.9	16.5	17.1	365.9
Wyo.	10.8	17.3	26.9	37.3	38.9	34.5	25.5	23.1	22.1	18.5	10.2	7.9	273.5
Colo.	13.1	21.4	30.2	42.7	44.7	38.2	33.1	24.6	25.7	18.5	11.2	7.3	310.7
N.Mex.	11.1	19.9	26.6	35.2	34.3	32.0	25.1	20.8	18.2	14.5	9.0	6.5	253.7
Ariz.	19.3	23.6	34.1	41.0	29.8	33.0	22.2	18.3	21.8	21.0	12.1	12.3	293.5
Utah	18.4	24.8	35.3	38.7	44.9	37.0	28.6	33.3	27.6	21.3	11.8	12.5	334.2
Nev.	18.3	15.7	31.5	60.6	62.9	49.0	52.6	35.9	21.5	23.8	11.1	9.9	393.1
Wash.	21.0	23.2	31.8	45.3	42.6	37.5	31.5	30.4	22.8	21.0	15.6	13.9	337.1
Oreg.	19.1	24.0	35.1	46.5	45.8	38.2	28.4	29.2	26.0	22.0	15.9	13.6	343.8
Calif.	18.8	22.1	35.4	42.8	39.6	33.6	31.5	25.4	22.6	17.2	14.3	9.7	314.0
U. S.	13.8	21.4	30.9	45.2	43.2	37.7	30.9	25.3	21.9	18.1	13.9	11.5	313.7



Table XXXVf.

EGGS LAID PER FARM FLOCK - 1929  
As reported by crop correspondents.

State	Jan. 1	Feb. 1	Mar. 1	Apr. 1	May 1	June 1	July 1	Aug. 1	Sept. 1	Oct. 1	Nov. 1	Dec. 1	Sum of twelve layings
Me.	22.6	24.8	23.9	36.1	32.1	31.1	24.2	23.1	21.1	18.1	14.9	12.9	284.9
N.H.	20.0	23.9	25.7	31.6	41.4	29.2	28.7	23.9	27.9	17.4	19.8	16.9	306.4
Vt.	11.6	13.8	16.0	29.4	31.5	26.8	24.9	19.3	17.7	12.0	7.7	8.4	219.1
Mass.	26.1	27.7	36.6	41.6	43.2	32.1	30.9	26.6	24.7	21.4	20.3	21.6	352.8
R.I.	18.4	23.1	32.5	43.6	37.6	23.8	25.2	32.3	17.1	18.9	14.2	22.0	313.7
Conn.	30.5	26.7	31.5	45.6	46.4	31.6	30.7	29.0	32.9	26.5	19.4	23.2	374.0
N.Y.	19.2	22.7	30.4	50.2	50.3	47.0	38.2	33.4	28.5	19.5	11.2	13.2	363.8
N.J.	21.3	26.7	40.1	65.0	49.4	43.2	40.0	38.7	26.5	20.1	13.4	19.4	403.8
Pa.	21.9	27.8	40.3	59.2	54.6	47.6	40.0	36.8	29.9	22.5	15.9	17.2	413.7
Ohio	22.0	24.9	36.9	63.2	61.1	52.8	41.4	37.1	31.3	23.1	15.7	15.1	424.6
Ind.	21.0	23.5	36.4	64.5	61.5	53.3	42.2	34.6	29.9	21.9	15.7	13.4	417.9
Ill.	17.5	19.5	33.1	66.0	62.1	50.8	40.4	33.7	28.1	22.4	15.0	11.0	399.6
Mich.	17.7	19.7	26.0	43.7	48.3	43.8	34.4	29.8	27.2	17.7	11.8	10.3	330.4
Wis.	19.3	21.1	28.2	47.4	53.8	45.5	36.9	31.2	26.2	19.2	12.6	12.6	354.0
Minn.	18.5	19.0	25.1	48.4	56.0	46.8	37.3	32.1	27.0	19.2	11.6	9.4	350.4
Iowa	19.7	20.4	32.5	72.2	79.5	66.6	52.4	43.6	37.0	28.2	18.8	13.0	483.9
Mo.	20.8	24.0	37.8	72.4	65.4	59.4	43.8	36.1	30.5	25.9	17.2	12.6	445.9
N.D.	10.8	9.6	13.0	35.1	38.3	35.0	27.4	23.1	21.5	15.5	10.3	3.8	243.4
S.D.	16.7	16.5	22.4	60.0	60.8	51.4	38.8	37.0	30.5	22.9	14.8	8.3	380.1
Nebr.	18.0	20.9	36.0	58.7	58.9	48.1	39.5	33.4	28.3	20.5	15.2	9.4	386.9
Kans.	24.2	29.3	50.6	76.8	71.1	64.1	54.1	41.7	32.0	27.6	19.3	11.6	502.4
Del.	27.8	31.5	55.0	59.9	74.0	62.4	69.7	50.5	42.1	30.4	18.4	25.2	546.9
Md.	21.8	29.5	45.7	63.6	55.5	43.1	40.8	39.0	30.4	22.3	14.2	16.2	422.1
Va.	17.8	21.8	30.5	42.7	33.5	30.2	25.5	22.0	17.1	15.9	11.5	11.3	279.8
W.Va.	15.2	19.9	24.2	42.0	36.4	30.6	25.4	22.2	19.1	15.9	9.2	9.7	269.8
N.C.	12.2	14.9	18.8	24.7	20.3	18.2	15.9	14.9	12.9	11.5	10.5	9.3	184.1
S.C.	9.6	13.3	20.2	24.2	19.3	17.3	16.1	14.0	10.4	7.9	7.3	7.8	167.4
Ga.	10.4	13.6	16.9	20.6	19.4	16.0	15.3	13.1	10.0	10.1	7.6	9.3	162.3
Fla.	14.7	23.3	25.3	32.4	27.7	22.9	19.8	21.2	17.0	12.6	11.7	13.1	241.7
Ky.	11.5	13.0	17.7	35.2	30.9	22.4	19.5	17.4	14.5	13.1	9.7	7.8	212.7
Tenn.	11.4	16.9	22.1	36.3	26.5	22.3	21.5	17.6	13.4	13.0	9.8	8.3	219.1
Ala.	9.4	14.5	18.6	25.5	20.3	17.8	17.9	15.7	12.6	11.5	9.6	8.4	181.8
Miss.	11.8	14.1	16.3	21.6	19.0	17.8	15.3	13.6	11.6	11.0	10.5	8.3	170.9
Ark.	11.4	13.0	17.8	29.4	26.7	22.9	18.3	16.3	11.9	11.6	10.2	8.3	197.8
La.	10.8	16.7	20.8	25.1	23.8	18.3	18.8	14.6	13.4	11.8	13.6	10.5	198.2
Okla.	20.8	27.8	39.0	55.0	47.8	40.3	32.9	27.3	20.9	19.7	16.9	11.2	360.6
Tex.	15.9	25.6	32.2	47.5	39.4	33.2	27.1	24.8	20.6	19.2	16.4	11.3	313.2
Mont.	12.0	14.2	13.4	33.2	37.0	30.3	25.5	22.0	20.2	15.6	9.9	7.1	240.4
Idaho	20.0	21.4	30.2	41.8	53.1	39.2	35.1	36.5	29.1	22.0	15.9	16.3	360.6
Wyo.	14.0	13.7	19.0	31.9	34.4	34.7	24.8	25.0	21.6	18.7	13.0	7.0	257.8
Colo.	15.3	19.2	24.8	40.1	46.8	37.7	41.7	31.8	27.1	18.2	13.2	6.2	321.9
N.Mex.	12.6	23.3	21.7	33.9	36.8	27.4	23.9	23.5	16.9	16.3	11.3	6.1	253.7
Ariz.	16.1	26.2	35.1	38.7	36.7	32.2	21.1	21.0	19.3	21.1	14.6	14.9	297.0
Utah	11.0	17.5	38.1	38.1	34.8	33.1	27.7	21.8	22.9	29.2	18.0	18.7	320.9
Nev.	14.1	37.7	45.7	63.5	44.3	48.6	34.6	31.2	35.2	45.8	11.0	16.4	428.1
Wash.	20.0	22.2	27.8	40.6	42.1	38.3	35.7	34.3	27.7	24.5	17.4	17.8	348.9
Oreg.	21.5	23.1	30.6	42.7	47.3	40.0	31.4	30.3	26.7	21.8	16.4	15.2	347.0
Calif.	14.2	18.5	31.2	33.0	36.0	31.2	24.0	24.2	19.2	16.9	13.4	10.0	271.8
U. S.	16.4	20.0	28.1	45.6	43.1	36.9	30.6	26.6	22.0	18.0	13.2	11.1	311.7



Table XXXVII EGGS laid per 100 hens and pullets of laying age on the first day of each month of 1925-1929 in farm flocks of crop reporters.

The figures given in Table XXXVII are based on monthly reports of crop correspondents for their own flocks. Returns cover flocks of less than 400 hens and pullets of laying age on January 1, larger farms having been excluded because irregularity in numbers of returns from the larger groups would result in upsetting the indications of the true trend of change from month to month.

The change in number of layers in farm flocks from a maximum number at the beginning of the year to a minimum in the early fall accounts for the relatively greater seasonal production in the summer and fall months as shown in this table compared with those shown in Table XXXVI on layings per farm flock. The layings shown in this table are from an assumed unchanging number of layers whereas, numbers in fact decline by September to about 70 per cent of numbers at the beginning of the year. The low point in actual layings per flock in the late fall and early winter as shown in Table XXXVI is due to both a decrease in layings per hen and in the numbers of layers. During December the increase of layers from pullets coming to laying age tends to balance losses from decreased rate of layings, and beginning with January the increasing rate of layings supplements maximum numbers of layers to achieve maximum production in April.

The seasonal trend in layings is extremely constant, as exhibited both in Tables XXXVI and XXXVII and shown graphically in Figures 14, 15, 17 and 18. The figures by states reflect relative layings quite accurately in important agricultural states, from which returns usually number from several hundred up to a thousand or more. They are much less dependable in small states, from which returns sometimes number less than 100. They are particularly doubtful for the states of Delaware, Nevada, Arizona, New Mexico, Florida, and a number of New England and far western states. The figures by grand divisions should be quite accurate. Comparisons between the grand divisions are valid, except that layings in the South are probably relatively higher compared to average layings in that section than is the case in other grand divisions.

See comments in connection with Table XXXVI.

(Insert from page 106) TREND OF MONTHLY EGG RECEIPTS AT MARKETS

The records of layings per flock and of receipts at the 5 principal markets synchronize very well as shown on Figure No. 16 page 109. This chart shows that the trend of relative receipts at the 5 cities tends to begin its upward movement a little earlier and its downward movement a little later than the trend of layings and that the trend of relative receipts at the markets are relatively lighter in the last half of the year and heavier in the first half than the trend of layings.

These facts are consistent with the greater surplus available for marketing in the first half of the year, with the poorer quality of summer eggs and the difficulty of getting them to market in good condition during the warm season, and with the heavy movement of eggs from commercial flocks at the beginning of the season, the layings from these latter not being adequately reflected in the returns of layings per farm flock.

# EGGS LAID PER 100 HENS AND PULLETS OF LAYING AGE. ON THE FIRST DAY OF EACH MONTH. 1925-1928

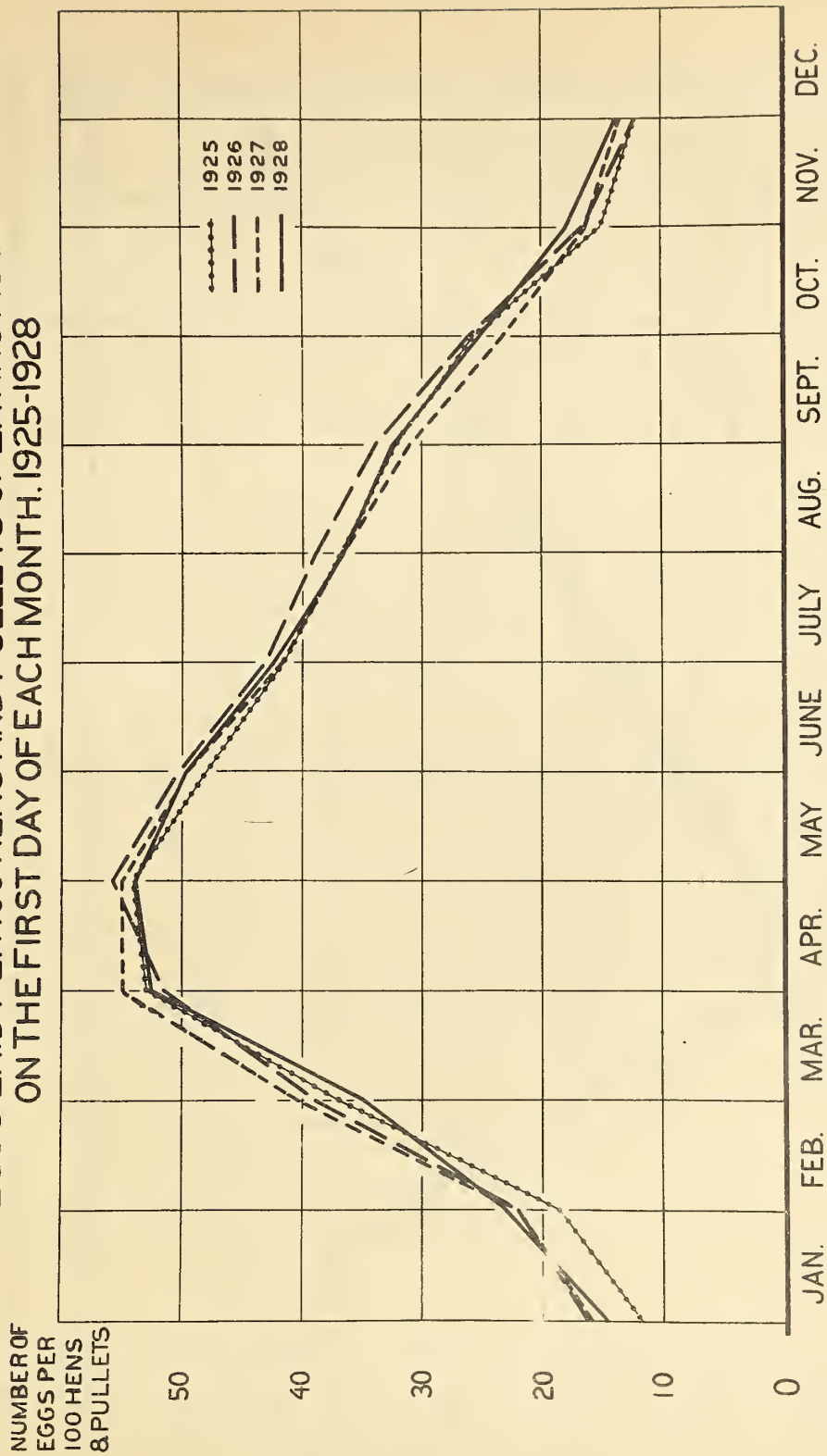
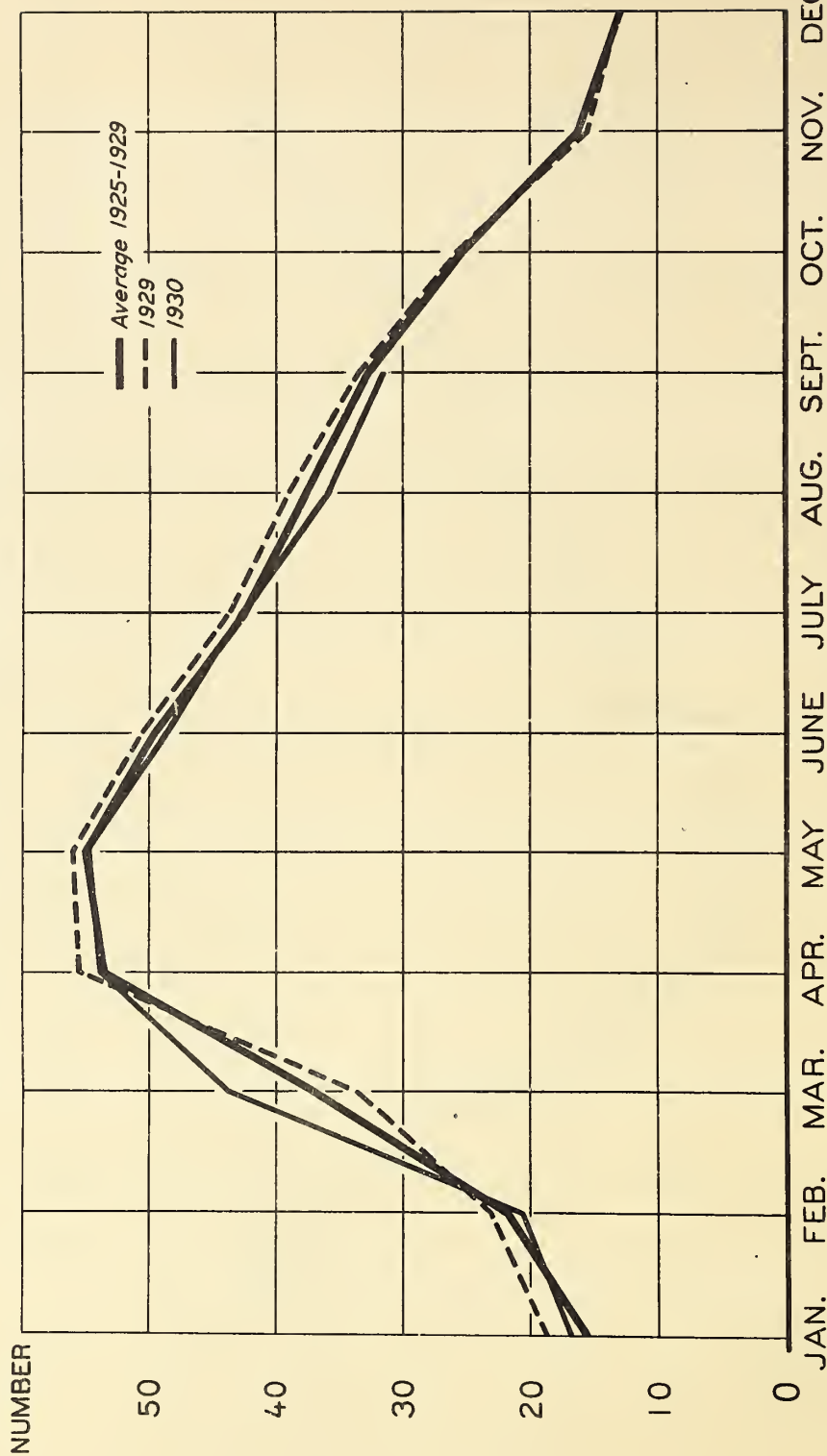


FIGURE 17

# EGGS LAID PER 100 HENS AND PULLETS OF LAYING AGE ON THE FIRST DAY OF EACH MONTH



U.S. DEPARTMENT OF AGRICULTURE

BUREAU OF AGRICULTURAL ECONOMICS

FIGURE 18



Table XXXVII

EGGS LAID PER 100 HENS AND PULLETS OF LAYING AGE  
ON FIRST DAY OF EACH MONTH, 1925-1929, IN THE FARM FLOCKS OF CROP REPORTERS

Geographic division	Jan.: 1	Feb.: 1	Mar.: 1	Apr.: 1	May: 1	June: 1	July: 1	Aug.: 1	Sept: 1	Oct.: 1	Nov.: 1	Dec.: 1	Sum of 12 layings
No. Atlantic													
1925	15.1	21.1	37.6	56.4	58.5	53.3	46.2	42.9	36.5	27.1	13.0	13.3	420.8
1926	19.4	24.8	35.0	49.3	52.9	53.9	47.4	43.8	39.3	27.9	14.8	14.2	426.7
1927	17.8	24.7	38.4	57.8	59.7	54.6	46.3	41.9	36.4	26.8	14.9	13.7	432.8
1928	18.0	25.9	35.9	52.6	58.1	54.5	47.2	41.8	37.2	25.5	16.6	16.3	429.7
1929	23.0	27.5	38.6	58.0	58.8	53.9	47.8	45.2	38.7	27.1	16.6	17.2	452.5
No. Central													
1925	8.1	15.3	33.5	52.7	55.4	48.4	41.4	36.5	32.6	25.7	12.4	9.5	371.7
1926	13.4	19.8	36.1	51.1	56.9	51.2	43.0	38.0	33.4	24.7	14.0	8.9	390.4
1927	12.5	18.0	36.7	54.5	55.8	50.4	41.4	35.9	30.8	22.1	14.3	10.6	383.2
1928	11.7	20.4	31.4	52.0	54.1	50.1	42.4	36.4	33.1	25.6	16.3	11.4	385.1
1929	18.6	18.7	29.4	54.2	57.3	52.1	43.8	38.8	34.3	25.3	15.1	10.3	396.0
So. Atlantic													
1925	19.1	22.6	42.0	51.4	51.0	45.4	40.4	37.1	30.5	24.6	18.4	14.7	397.1
1926	20.0	25.2	42.6	50.3	51.4	46.3	42.0	39.1	32.4	26.6	19.3	10.9	412.5
1927	20.9	29.0	46.4	54.9	52.1	46.2	40.6	36.9	28.9	23.4	17.9	17.4	414.6
1928	18.9	26.4	39.1	51.3	50.1	46.5	30.9	35.5	29.7	22.9	18.2	17.1	395.5
1929	21.3	29.5	39.7	54.9	50.2	44.7	41.0	36.0	29.1	24.0	17.2	17.1	405.1
So. Central													
1925	13.3	20.3	42.1	51.9	48.7	43.9	37.6	32.8	27.4	24.0	18.6	14.2	374.9
1926	17.5	22.2	42.2	51.8	51.7	46.2	40.7	36.7	31.7	27.5	20.9	14.8	403.9
1927	20.2	25.0	46.6	54.8	51.1	45.3	38.5	32.9	27.4	22.7	19.2	15.8	399.6
1928	16.0	24.1	37.4	51.3	50.2	45.6	38.1	31.8	26.6	23.0	20.4	15.6	380.2
1929	18.7	26.3	36.5	56.3	52.3	45.3	39.2	35.2	28.0	24.7	19.5	13.8	395.9
Western													
1925	15.9	26.5	41.7	54.0	56.8	52.0	46.5	41.7	37.3	28.8	21.7	19.8	442.7
1926	25.0	28.5	49.2	58.8	59.3	53.4	46.6	43.3	38.1	30.1	21.3	17.6	471.8
1927	20.2	27.8	42.7	54.6	58.2	52.7	47.5	42.2	37.4	28.0	22.0	18.4	451.7
1928	21.2	29.7	44.8	58.2	58.3	53.2	47.5	42.0	38.2	30.4	20.3	16.5	460.4
1929	23.3	28.9	39.1	56.7	59.6	55.3	50.2	45.6	38.9	31.2	22.2	16.5	467.6
Unit. States													
1925	11.6	18.5	37.1	52.9	54.1	48.1	41.5	36.9	32.2	25.7	15.0	12.2	385.8
1926	16.3	22.0	38.9	51.6	55.8	50.3	43.2	38.9	34.0	26.2	16.5	12.1	405.9
1927	16.0	22.0	40.3	55.0	55.1	49.6	41.8	36.6	31.1	23.3	16.3	13.3	400.3
1928	14.7	23.0	34.9	52.4	53.7	49.5	42.2	36.5	32.3	25.2	17.8	13.7	396.0
1929	18.7	23.1	33.6	55.3	56.0	50.5	43.6	39.0	33.4	25.7	16.9	12.9	408.6

Table XXXVII-a.

EGGS LAID PER 100 HENS AND PULLETS OF LAYING AGE - 1925  
AS REPORTED FOR FARM FLOCKS OF CROP REPORTERS

State	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Sum of twelve layings
	1	1	1	1	1	1	1	1	1	1	1	1	
Me.	12.0	31.2	40.0	53.0	58.7	56.5	52.4	50.1	39.8	32.0	21.6	19.4	466.7
N.H.	23.8	25.3	42.7	56.4	54.4	56.5	46.3	46.8	35.3	31.4	15.0	23.9	457.8
Vt.	13.7	21.0	35.6	58.8	70.6	56.0	49.6	46.8	41.9	29.8	15.3	12.7	451.8
Mass.	14.9	23.1	42.2	56.0	48.7	52.6	46.1	41.3	38.1	30.7	20.6	18.5	432.8
R.I.	16.6	25.1	42.0	52.7	48.4	29.8	45.0	36.6	29.6	25.3	12.2	16.5	379.8
Conn.	22.1	25.6	42.9	57.8	60.9	43.5	47.2	45.2	32.8	30.8	18.7	20.4	447.9
N.Y.	13.3	19.3	33.7	57.0	61.9	56.3	47.1	42.9	38.5	25.4	9.4	10.7	415.5
N.J.	15.2	18.4	34.7	55.4	56.2	62.7	44.4	40.3	32.7	25.4	13.1	13.5	412.0
Pa.	15.0	20.8	39.6	56.2	56.8	49.2	44.8	42.2	35.4	27.8	12.8	12.6	412.4
Ohio	11.1	18.5	38.3	56.6	58.5	53.7	43.6	40.7	37.1	29.3	13.2	11.2	412.3
Ind.	9.6	16.4	37.3	56.0	57.2	48.4	41.9	38.1	34.0	27.4	13.6	9.7	389.6
Ill.	7.3	14.0	30.6	50.5	51.7	43.6	38.7	33.7	29.5	24.1	12.1	8.5	344.3
Mich.	13.8	19.3	34.7	55.6	61.9	55.2	45.4	40.9	35.6	27.2	14.8	11.3	415.7
Wis.	9.9	18.6	30.3	52.8	58.9	52.1	43.1	38.4	36.9	28.1	12.4	11.3	392.8
Minn.	7.9	15.2	27.8	51.4	57.9	51.8	44.2	38.6	34.4	26.1	10.5	9.6	375.4
Iowa	5.8	12.0	26.6	48.3	53.0	47.0	40.8	34.4	32.7	25.0	12.1	7.8	345.5
Mo.	8.1	16.6	38.2	55.9	55.7	45.3	38.0	33.0	29.2	25.4	12.7	9.4	363.5
N.D.	5.0	11.0	26.5	42.0	56.0	51.0	44.0	40.0	36.0	28.0	12.0	7.7	359.2
S.D.	5.7	11.2	27.0	49.9	53.7	47.0	42.9	36.2	36.1	25.1	12.0	8.3	355.9
Nebr.	6.3	11.6	35.9	50.6	52.8	46.9	41.7	35.6	31.0	24.2	11.3	9.2	357.1
Kans.	6.9	16.0	40.7	55.1	53.1	47.5	40.8	36.7	28.9	22.0	11.8	10.0	369.5
Del.	17.2	22.2	40.8	58.6	60.7	50.6	38.3	38.0	35.3	21.1	13.1	13.0	413.9
Md.	14.5	16.8	37.7	56.3	58.8	45.8	40.7	39.2	33.5	25.8	17.4	12.9	399.4
Va.	17.4	18.1	40.7	47.4	49.6	44.2	38.4	35.4	27.5	23.0	14.8	13.7	370.2
W.Va.	15.5	20.7	42.4	56.6	56.9	49.3	40.6	37.6	32.1	27.5	14.1	13.2	406.5
N.C.	21.3	26.4	44.0	52.7	47.9	45.9	41.5	38.2	32.1	28.1	21.6	18.2	417.9
S.C.	21.1	22.3	39.7	47.3	48.7	41.1	39.4	39.9	28.8	21.8	18.8	12.2	381.6
Ga.	20.0	24.7	41.3	47.8	47.2	43.9	41.5	35.0	27.6	22.4	20.2	14.1	385.7
Fla.	27.5	35.3	54.3	55.0	51.3	49.3	42.8	35.7	36.0	24.8	24.0	19.6	455.6
Ky.	9.6	15.9	39.3	53.9	51.7	44.3	37.5	35.0	29.1	27.8	16.9	11.3	372.8
Tenn.	12.8	18.4	38.7	49.7	48.6	40.4	36.1	32.4	26.1	22.8	16.5	11.2	353.7
Ala.	15.9	21.3	38.4	49.9	46.6	43.6	40.1	35.8	28.9	23.5	16.5	17.1	377.6
Miss.	18.3	22.0	41.7	49.5	46.2	44.2	37.3	34.2	30.4	23.8	24.0	21.6	393.2
Ark.	18.9	21.8	41.6	55.3	50.1	43.0	40.1	34.1	28.5	26.0	22.9	13.6	395.9
La.	17.0	23.3	31.0	49.7	48.0	40.8	36.1	34.3	29.8	23.3	22.5	19.6	375.4
Okla.	10.9	20.5	45.3	53.0	50.9	47.4	39.4	34.1	26.0	22.4	14.1	12.0	376.0
Tex.	12.3	21.9	47.2	51.8	46.8	44.2	36.2	28.8	26.1	23.4	20.6	14.9	374.2
Mont.	8.0	17.8	33.2	41.7	58.2	51.4	44.8	38.6	38.8	29.1	12.1	9.5	383.2
Idaho	14.1	17.8	34.7	48.7	61.5	56.3	48.6	46.6	40.6	33.8	22.0	19.1	445.8
Wyo.	8.6	15.8	35.4	51.1	54.3	57.3	42.5	38.0	39.9	32.5	16.2	12.0	403.6
Colo.	7.8	15.0	40.0	51.0	53.2	49.3	41.7	37.9	36.2	25.4	14.2	9.2	380.9
N.Mex.	14.4	25.9	39.0	48.7	49.8	51.4	44.0	37.1	37.6	21.8	17.9	13.7	401.3
Ariz.	23.1	32.2	54.4	56.1	49.6	34.0	47.6	37.4	35.5	30.8	27.0	19.8	447.5
Utah	13.6	23.5	31.4	57.3	59.3	53.5	50.7	43.5	39.6	33.5	23.8	18.0	447.7
Nev.	27.2	21.5	35.0	51.0	63.0	53.6	44.8	43.5	35.5	35.7	17.5	11.0	439.3
Wash.	18.3	29.6	45.2	58.7	61.7	57.2	49.4	45.1	40.1	31.4	21.5	23.0	481.2
Oreg.	15.4	29.3	44.5	59.2	58.0	56.9	52.0	45.9	38.5	30.4	24.8	20.2	475.1
Calif.	20.0	32.2	43.9	55.8	55.8	49.8	45.7	41.4	35.1	27.3	25.8	25.3	458.1
U. S.	11.6	18.5	37.1	52.9	54.1	48.1	41.5	36.9	32.2	25.7	15.0	12.2	385.8



EGGS LAID PER 100 HENS AND PULLETS OF LAYING AGE - 1926  
AS REPORTED FOR FARM FLOCKS OF CROP REPORTERS

State	Jan. 1	Feb. 1	Mar. 1	Apr. 1	May 1	June 1	July 1	Aug. 1	Sept. 1	Oct. 1	Nov. 1	Dec. 1	Sum of twelve layings
Me.	25.0	31.3	43.0	49.7	54.6	55.6	51.3	43.4	41.1	34.9	21.1	15.9	467.4
N.H.	23.3	31.0	38.5	49.2	52.7	51.0	46.1	47.2	37.0	27.6	19.0	20.6	443.2
Vt.	22.6	29.1	34.0	44.3	57.6	57.0	51.3	46.3	40.7	31.4	13.9	13.6	442.3
Mass.	27.6	29.8	40.0	50.6	60.2	54.9	46.2	40.2	34.2	36.7	21.4	20.2	462.0
R.I.	24.5	17.8	29.3	52.7	54.7	52.9	44.5	38.7	37.8	28.1	16.5	17.1	415.1
Conn.	21.6	29.3	30.0	55.2	57.3	51.1	43.1	42.2	39.1	30.9	19.4	20.0	456.5
N.Y.	17.9	22.1	28.3	42.8	60.2	56.3	49.6	44.6	39.3	27.8	11.5	13.4	414.3
N.J.	17.6	24.1	37.2	52.0	61.6	51.4	41.9	42.0	34.9	27.2	14.9	14.3	419.1
Pa.	13.4	24.6	37.6	53.0	58.1	51.9	46.4	44.0	40.4	25.7	15.0	12.3	427.9
Ohio	16.5	21.6	37.5	53.0	59.3	54.3	47.9	42.6	33.4	30.3	15.4	10.9	423.7
Ind.	14.0	20.2	33.1	53.4	59.4	52.2	44.2	40.3	36.3	28.0	14.5	9.4	410.5
Ill.	11.4	17.0	33.7	49.5	54.1	46.6	40.2	35.9	31.3	23.7	13.3	7.5	364.7
Mich.	16.6	20.8	28.4	47.7	60.0	56.6	43.3	43.3	40.2	30.1	14.5	9.2	416.2
Wis.	16.4	22.4	32.5	48.1	60.3	54.3	46.1	40.6	36.0	25.7	12.4	8.9	404.7
Minn.	13.0	17.4	28.1	47.2	59.4	52.1	43.6	37.9	31.0	22.6	12.1	7.6	375.0
Iowa	10.5	17.5	31.2	49.0	55.1	43.3	40.3	36.2	32.4	23.0	14.3	8.2	369.5
Mo.	13.4	19.6	41.3	53.7	57.0	53.9	40.1	34.6	30.6	23.1	13.6	9.3	390.7
N.D.	10.9	14.4	29.9	43.4	55.0	51.4	41.9	38.5	35.6	24.5	12.3	5.7	363.5
S.D.	11.2	13.9	34.6	51.3	55.5	49.0	40.3	36.4	30.9	20.4	12.4	6.7	362.6
Nebr.	11.7	19.9	42.3	53.2	53.2	49.5	42.6	35.1	31.1	22.0	14.2	8.6	383.4
Kans.	15.0	27.5	42.1	55.0	57.9	49.1	43.4	39.0	29.7	23.0	15.2	10.1	406.0
Del.	23.3	25.2	34.1	54.7	57.3	51.3	39.0	37.3	37.0	20.5	11.3	15.4	407.9
Md.	13.4	23.1	36.9	55.6	53.1	47.3	44.0	40.3	32.4	25.1	16.0	12.0	404.7
Va.	13.8	22.3	42.4	51.8	51.2	46.3	40.2	37.3	31.2	24.6	17.3	14.1	398.0
W.Va.	19.6	23.2	40.1	53.2	58.9	52.6	46.1	41.7	34.2	27.2	16.0	12.0	424.3
N.C.	21.1	26.2	45.0	43.3	51.4	45.0	44.0	43.0	34.7	29.4	23.1	20.2	431.9
S.C.	17.2	25.3	44.1	46.0	47.0	44.4	40.7	35.7	29.3	27.6	18.6	17.4	394.0
Ga.	19.3	26.7	44.3	46.0	46.9	44.0	41.0	37.0	29.7	27.1	21.3	19.3	402.6
Fla.	29.4	37.0	49.4	53.3	52.6	49.3	39.0	30.5	34.9	26.3	24.4	22.4	457.0
Ky.	14.9	17.8	40.9	50.0	52.2	45.9	39.3	37.0	33.2	23.4	18.9	12.3	391.3
Tenn.	14.4	18.5	41.0	50.7	49.1	43.9	40.3	36.3	31.0	26.3	19.7	12.6	384.3
Ala.	10.7	26.3	40.2	49.9	43.5	45.7	40.6	36.4	29.7	26.5	23.4	17.7	404.1
Miss.	22.4	30.1	50.6	52.5	49.3	43.0	41.3	36.3	33.3	23.2	22.9	19.7	435.6
Ark.	18.4	24.3	47.3	52.9	51.7	45.6	42.2	35.5	30.4	31.9	22.9	13.1	417.2
La.	22.3	26.6	49.6	49.4	49.5	43.5	33.9	31.0	27.9	26.7	24.3	20.0	411.0
Okla.	17.5	21.1	49.3	54.2	55.3	49.2	42.7	38.9	30.5	23.3	16.4	13.2	412.6
Tex.	17.7	21.9	49.5	52.4	52.2	46.2	39.3	36.4	33.5	23.7	22.9	15.9	417.1
Mont.	21.3	22.7	42.1	56.4	60.0	51.0	43.2	39.3	40.3	23.3	13.0	10.5	433.6
Idaho	24.2	30.1	43.3	59.1	65.2	56.3	50.3	45.7	43.9	30.3	20.3	17.4	492.1
Wyo.	17.2	20.9	42.2	55.9	60.1	53.3	42.7	41.1	33.3	30.9	17.2	13.5	433.3
Colo.	14.3	21.3	43.4	52.7	56.3	50.1	43.7	40.0	36.6	23.4	17.4	10.7	410.9
N.Mex.	13.4	23.6	44.9	52.4	57.6	50.2	49.0	44.3	33.2	23.4	19.1	13.0	439.1
Ariz.	23.3	31.5	39.2	53.3	55.1	54.4	44.6	45.1	34.4	36.3	25.3	23.2	466.7
Utah	24.6	32.7	44.7	61.0	73.6	57.4	43.5	44.2	44.3	31.6	19.7	20.6	503.4
Nev.	33.9	33.6	53.1	59.5	53.6	57.2	51.1	42.1	36.4	32.5	26.6	19.6	509.2
Wash.	25.6	29.2	50.3	61.7	61.6	53.1	50.5	49.2	42.0	30.9	24.4	23.0	509.5
Oreg.	27.3	31.3	49.2	62.3	62.0	53.3	45.7	44.6	36.7	30.6	22.2	21.7	437.9
Calif.	29.3	31.3	54.2	59.0	56.9	52.7	46.4	42.2	35.3	31.6	22.3	13.1	431.4
U. S.	16.3	22.0	33.9	51.6	55.3	50.3	43.2	30.9	34.0	26.2	16.5	12.1	405.9



Table XXXVIIIc.

EGGS LAID PER 100 HENS AND HULFETS OF LAYING AGE - 1927  
AS REPORTED FOR FARM FLOCKS OF CROP REPORTERS

State	Jan. 1	Feb. 1	Mar. 1	Apr. 1	May 1	June 1	July 1	Aug. 1	Sept. 1	Oct. 1	Nov. 1	Dec. 1	Sum of twelve layings
Me.	24.0	30.6	37.3	56.0	53.1	55.2	47.6	44.6	39.6	32.2	19.3	17.3	462.3
N.H.	21.5	23.7	39.4	55.5	54.2	49.6	46.0	43.1	36.3	29.6	16.5	23.0	449.2
Vt.	19.1	23.1	35.1	57.1	61.3	56.2	51.1	39.8	40.0	31.2	13.3	12.3	445.1
Mass.	23.6	23.3	45.1	53.7	52.4	52.2	46.8	41.6	34.7	30.0	19.9	23.2	456.5
R.I.	15.0	23.9	30.3	56.6	58.0	51.5	33.5	34.7	33.9	31.5	12.0	24.7	419.4
Conn.	26.2	27.4	41.3	56.6	61.0	57.0	47.4	47.3	41.2	33.0	24.6	20.7	485.3
N.Y.	16.4	22.3	32.3	57.5	62.3	57.7	43.6	42.4	37.3	26.9	12.3	10.7	427.7
N.J.	14.0	22.7	33.0	57.2	60.1	50.0	43.6	39.4	31.6	23.2	15.2	13.5	409.3
Pa.	16.2	25.1	41.3	59.2	53.8	53.4	44.6	41.2	35.9	25.2	14.2	12.0	423.4
Ohio	15.7	23.5	41.1	61.3	61.1	57.2	45.2	41.6	37.0	26.9	15.6	13.7	437.4
Ind.	13.1	17.6	42.4	59.7	53.5	51.7	42.9	39.1	32.1	22.9	11.3	11.5	402.0
Ill.	11.4	14.1	37.2	53.6	52.2	46.5	37.0	33.3	23.6	19.2	14.6	9.7	353.2
Mich.	13.0	19.3	34.7	55.6	61.9	55.2	47.1	40.7	35.6	27.2	14.9	11.3	415.6
Wis.	13.7	20.5	34.6	56.0	60.0	53.7	43.4	37.3	33.8	22.7	12.3	10.3	390.3
Minn.	11.6	16.0	26.4	46.7	57.6	51.9	43.0	36.3	29.0	21.1	11.6	7.3	359.3
Iowa	8.9	15.9	33.3	50.0	54.0	43.2	40.0	34.6	31.4	20.6	13.6	9.0	359.5
Mo.	14.6	13.2	40.9	55.0	53.7	43.9	37.1	31.3	26.1	20.0	12.9	11.6	372.3
M.D.	7.4	11.0	20.5	46.8	53.0	51.6	44.1	37.1	34.6	29.5	16.5	5.0	353.7
S.D.	10.2	15.5	29.4	47.5	50.6	40.4	41.0	37.2	32.3	24.1	15.6	6.5	353.3
Nebr.	11.8	20.0	37.4	43.0	52.4	43.4	42.7	34.5	31.2	20.4	14.4	11.1	373.1
Kans.	13.9	20.7	42.9	62.4	55.4	43.6	41.7	34.5	29.3	21.4	16.3	13.6	400.7
Del.	15.2	25.3	43.2	56.9	57.9	51.2	47.5	43.3	27.7	15.9	17.3	22.3	424.2
Md.	15.0	23.8	41.3	59.1	57.0	47.9	41.1	36.1	31.7	23.2	15.6	13.9	406.2
Va.	17.6	25.5	45.1	56.1	52.7	45.5	40.0	36.0	26.3	21.9	15.3	15.2	397.7
W.Va.	17.0	27.4	45.6	61.3	53.9	52.3	41.0	37.6	30.6	23.4	14.5	13.2	423.6
N.C.	24.3	30.0	48.6	56.0	51.5	45.9	40.9	33.5	31.3	26.4	21.0	20.5	435.4
S.C.	25.3	29.1	44.0	43.9	47.1	41.5	36.7	32.3	25.3	22.2	13.4	13.2	339.5
Ga.	23.1	31.3	46.3	49.4	46.3	43.5	39.9	35.3	27.3	23.4	19.0	13.2	404.5
Fla.	27.8	50.1	59.1	52.3	53.5	43.6	41.7	40.1	23.5	27.9	23.3	19.3	472.7
Ky.	16.7	19.3	44.0	53.6	52.7	46.2	33.3	33.9	27.5	21.7	16.2	11.4	337.5
Tenn.	13.9	22.9	46.1	54.9	49.9	44.3	36.6	30.4	26.3	19.0	17.0	12.3	330.9
Ala.	22.3	23.4	45.6	50.7	43.9	44.0	39.9	35.9	23.3	22.3	10.2	13.9	333.9
Miss.	23.5	27.4	47.6	50.9	50.1	43.0	33.2	32.5	27.9	23.3	21.4	20.4	406.2
Ark.	20.6	23.7	46.4	55.1	54.0	45.7	36.3	32.6	23.2	30.2	21.0	17.2	411.5
La.	23.4	23.3	47.0	47.2	42.9	40.9	33.5	29.4	25.0	23.3	23.9	13.2	334.3
Okla.	13.0	22.0	47.1	55.4	52.1	47.5	39.3	35.1	23.0	21.2	17.4	13.4	397.0
Tex.	21.6	29.1	48.0	56.1	52.0	45.4	39.7	32.5	27.2	23.3	21.6	13.4	414.9
Mont.	11.6	17.0	31.9	52.5	55.8	52.3	45.3	40.1	39.2	39.2	21.5	9.0	415.9
Idaho	19.3	23.0	36.0	56.7	60.7	53.2	51.6	42.5	33.9	32.3	23.4	20.3	470.2
Wyo.	12.4	20.1	37.1	43.0	49.9	53.3	46.7	42.4	36.4	26.8	17.7	11.6	402.4
Colo.	12.5	22.6	32.9	43.0	52.3	56.2	42.1	39.9	34.2	24.4	19.4	11.9	390.9
N.Mex.	17.7	25.5	42.6	53.2	55.6	46.4	41.3	41.3	35.0	22.6	14.6	13.2	413.0
Ariz.	24.0	42.7	49.7	55.0	57.7	47.1	43.0	34.3	45.3	24.6	29.6	26.6	435.9
Utah	20.9	23.3	45.5	59.7	61.3	56.4	50.0	44.3	40.1	29.9	22.0	23.0	431.9
Nev.	14.3	29.3	45.0	54.4	65.1	56.3	42.7	45.7	47.6	24.0	22.6	19.5	467.3
Wash.	23.1	29.9	45.5	50.5	62.0	57.4	52.3	46.5	40.5	34.1	24.2	20.4	494.9
Oreg.	24.3	26.2	52.3	60.2	61.6	56.9	49.9	45.4	41.2	31.2	24.4	23.3	497.9
Calif.	22.7	30.9	45.6	54.2	53.4	50.6	46.5	41.4	35.0	23.2	21.7	20.1	450.3
U. S.	16.0	22.0	40.3	55.0	55.1	49.6	41.3	36.6	31.1	23.3	16.3	13.3	400.3